

Water Resources Data Colorado Water Year 2002

Volume 1. Missouri River Basin, Arkansas River Basin,
and Rio Grande Basin

By R.M. Crowfoot, W.F. Payne, and G.B. O'Neill

Water-Data Report CO-02-1

Prepared in cooperation with the State of Colorado
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

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2003

CALENDAR FOR WATER YEAR 2002

2001

OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6					1	2	3							1
7	8	9	10	11	12	13	4	5	6	7	8	9	10	2	3	4	5	6	7	8
14	15	16	17	18	19	20	11	12	13	14	15	16	17	9	10	11	12	13	14	15
21	22	23	24	25	26	27	18	19	20	21	22	23	24	16	17	18	19	20	21	22
28	29	30	31				25	26	27	28	29	30		23	24	25	26	27	28	29
														30	31					

2002

JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
		1	2	3	4	5						1	2						1	2
6	7	8	9	10	11	12	3	4	5	6	7	8	9	3	4	5	6	7	8	9
13	14	15	16	17	18	19	10	11	12	13	14	15	16	10	11	12	13	14	15	16
20	21	22	23	24	25	26	17	18	19	20	21	22	23	17	18	19	20	21	22	23
27	28	29	30	31			24	25	26	27	28			24	25	26	27	28	29	30
																				31

APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6			1	2	3	4								1
7	8	9	10	11	12	13	5	6	7	8	9	10	11	2	3	4	5	6	7	8
14	15	16	17	18	19	20	12	13	14	15	16	17	18	9	10	11	12	13	14	15
21	22	23	24	25	26	27	19	20	21	22	23	24	25	16	17	18	19	20	21	22
28	29	30					26	27	28	29	30	31		23	24	25	26	27	28	29
																				30

JULY							AUGUST							SEPTEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6					1	2	3	1	2	3	4	5	6	7
7	8	9	10	11	12	13	4	5	6	7	8	9	10	8	9	10	11	12	13	14
14	15	16	17	18	19	20	11	12	13	14	15	16	17	15	16	17	18	19	20	21
21	22	23	24	25	26	27	18	19	20	21	22	23	24	22	23	24	25	26	27	28
28	29	30	31				25	26	27	28	29	30	31	29	30					

PREFACE

Volume 1 of the annual hydrologic data report of Colorado is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each state, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for Colorado are contained in two volumes:

- Volume 1. Missouri River, Arkansas River, and Rio Grande
basins in Colorado,
- Volume 2. Colorado River basin.

Volume 1 is the culmination of a concerted effort by dedicated personnel of the U. S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

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This report was prepared in cooperation with the State of Colorado and with other agencies under the general supervision of W.F. Horak, District Chief, Colorado.

REPORT DOCUMENTATION PAGE

*Form Approved
OMB No. 0704-0188*

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE May 2003	3. REPORT TYPE AND DATES COVERED Annual--Oct. 1, 2001 to Sept. 30, 2002	
4. TITLE AND SUBTITLE Water Resources Data for Colorado, Water Year 2002 Volume 1. Missouri River basin, Arkansas River basin, and Rio Grande basin.			5. FUNDING NUMBERS	
6. AUTHOR(S) R.M. Crowfoot, W.F. Payne, and G.B. O'Neill				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Geological Survey, Water Resources Division Box 25046, Mail Stop 415 Denver Federal Center Lakewood, CO 80225			8. PERFORMING ORGANIZATION REPORT NUMBER USGS-WDR-CO-02-1	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Geological Survey, Water Resources Division Box 25046, Mail Stop 415 Denver Federal Center Lakewood, CO 80225			10. SPONSORING / MONITORING AGENCY REPORT NUMBER USGS-WDR-CO-02-1	
11. SUPPLEMENTARY NOTES Prepared in cooperation with the State of Colorado and other agencies.				
12a. DISTRIBUTION / AVAILABILITY STATEMENT No restriction on distribution, this report may be purchased from: National Technical Information Service, Springfield, VA 22161			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) Water-resources data for Colorado for the 2002 water year consist of records of stage, discharge, and water quality of streams; stage, contents, and water-quality of lakes and reservoirs; meteorological data; and water levels and water quality of wells and springs. This report (Volumes 1 and 2) contains discharge records for 319 gaging stations, stage and contents of 16 lakes and reservoirs, discharge measurements for 1 partial-record low-flow station and 1 miscellaneous site, peak flow information for 22 crest-stage partial-record stations; water-quality for 118 gaging stations and for 8 lakes and reservoirs, supplemental water-quality for 183 gaged sites; water-quality for 65 miscellaneous sites and 14 observation wells; water levels for 2 observation wells, and meteorological data for 57 sites. Three pertinent stations operated by bordering states also are included in this report. The records were collected and computed by the Water Resources Division of the U.S. Geological Survey under the direction of W.F. Horak, District Chief. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies.				
14. SUBJECT TERMS *Colorado, *Hydrologic data, *Surface water, *Ground water, *Water quality; Flow rate, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediment, Water temperatures, Sampling sites, Water analyses			15. NUMBER OF PAGES 609	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT unclassified	

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discharge and quality are published in separate sections of the data report.

(Letter after station name designates type and frequency of published data.

Daily tables: (D) discharge, (C) specific conductance, (S) sediment, (T) temperature, (E) elevation or contents,
(O) dissolved oxygen, (P) pH, (R) precipitation.

Periodic tables: (c) chemical, (b) biological, (e) elevation or contents, (m) microbiological, (s) sediment, (t) temperature.)

Station
number page

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Missouri River:

PLATTE RIVER BASIN

North Platte River:

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South Platte River:

Middle Fork South Platte River:		
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Tarryall Creek at Upper Station near Como (D)	06696980	49
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WESTERN GULF OF MEXICO BASINS

RIO GRANDE BASIN

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VOLUME 1: MISSOURI RIVER, ARKANSAS RIVER, AND RIO GRANDE BASINS

By R.M. Crowfoot, W.F. Payne, and G.B. O'Neill

INTRODUCTION

The Water-Resources Division of the U.S. Geological Survey, in cooperation with State agencies, obtains a large amount of data pertaining to the water resources of Colorado each water year. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the Geological Survey, the data are published annually in the report series entitled "Water Resources Data - Colorado".

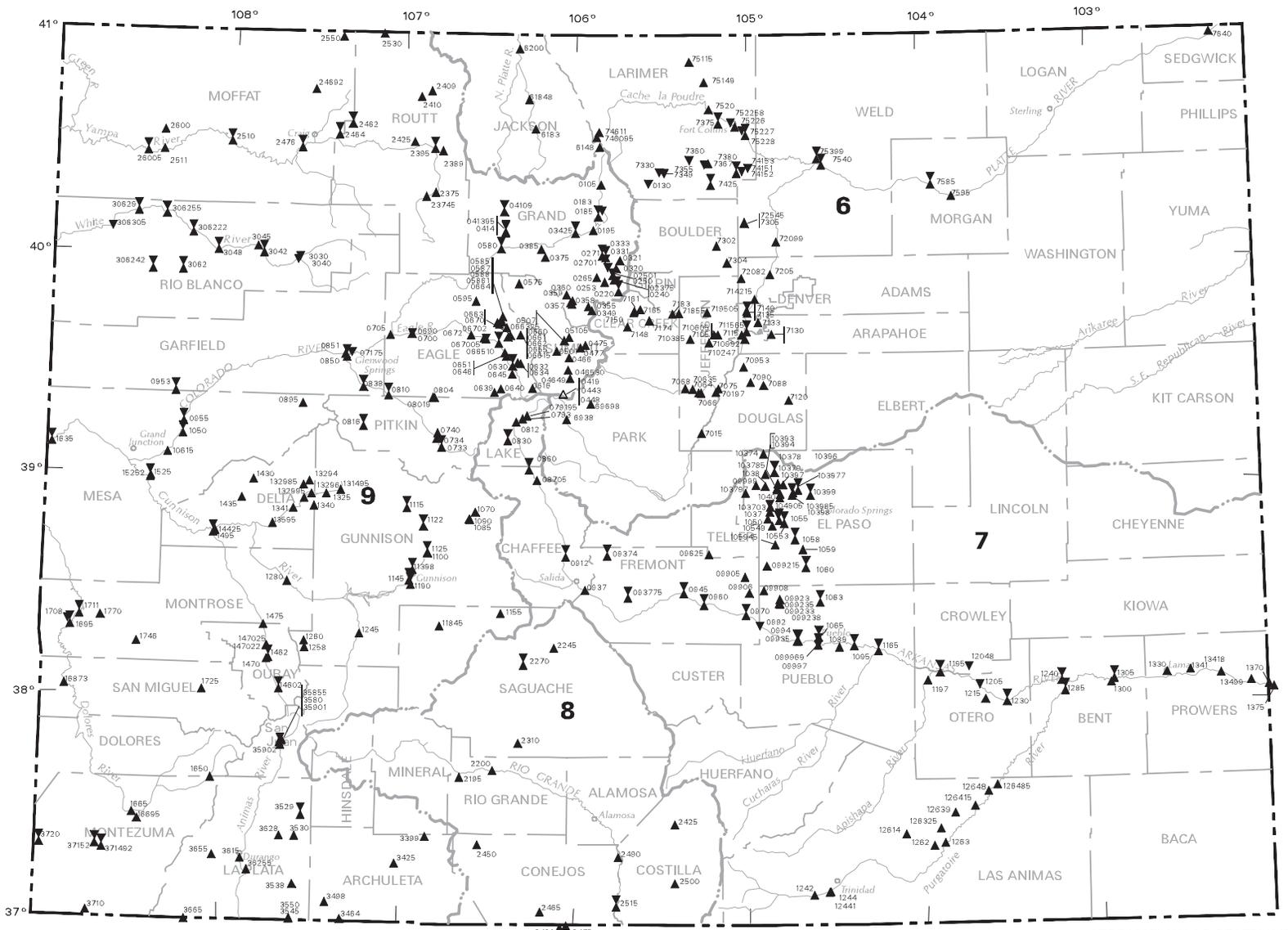
This report (Volume 1 of two volumes) includes records on both surface and ground water in the State, east of the Continental Divide. Specifically, it contains: (1) discharge records for 154 surface-water stations, peak discharges for 21 partial-record surface-water stations and discharge measurements only for 1 miscellaneous site; (2) stage and contents for 7 lakes and reservoirs; (3) water-quality data for 47 surface-water stations, 4 reservoirs, 16 miscellaneous sites, 14 wells, and miscellaneous surface-water-quality data for 75 gaged sites; and (4) meteorological data for 47 sites. Locations of lake and surface-water stations and surface-water-quality stations are shown in figure 1, locations of crest-stage partial-record stations are shown in figure 2. Three pertinent stations operated by bordering States are included in this report. The data in this report represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Colorado.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for Colorado were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-water Supply of the United States," Parts 6B, 7, 8, and 9. For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States." Data on ground-water levels for the 1935 through 1955 water years were published annually under the title "Water Levels and Artesian Pressures in Observation Wells in the United States." For the 1956 through 1974 water years the data were published in four 5-year reports under the title "Ground-Water Levels in the United States." Water-supply papers may be purchased from the, U.S. Geological Survey, Books and Open-File Reports, Federal Center, Building 810, Box 25425, Denver, CO 80225.

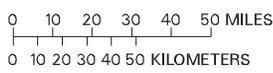
For water years 1961 through 1970, surface-water data were released by the Survey in annual reports on a State-boundary basis. Surface-water-quality records for water years 1964 through 1970 were similarly released either in separate reports or in conjunction with surface-water records.

Beginning with the 1971 water year, water data on surface-water, water quality, and ground-water are published in official Survey reports on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "**U.S. Geological Survey Water-Data Report CO-02-1.**" These water-data reports are for sale, in paper copy or in micro-fiche, by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the District Chief at the address given on the back of the title page or by telephone (303) 236-4882.



Base from U.S. Geological Survey
 1:100,000 Digital Line Graphs
 Lambert projection
 Standard Parallels 33° and 45°, central meridian -105° 30"



- ▲ STREAMFLOW OR RESERVOIR STATION
- ▼ WATER-QUALITY STATION
- △ TRANSMOUNTAIN DIVERSION

Figure 1.--Map showing locations of lake and surface-water stations and surface-water-quality stations in Colorado.

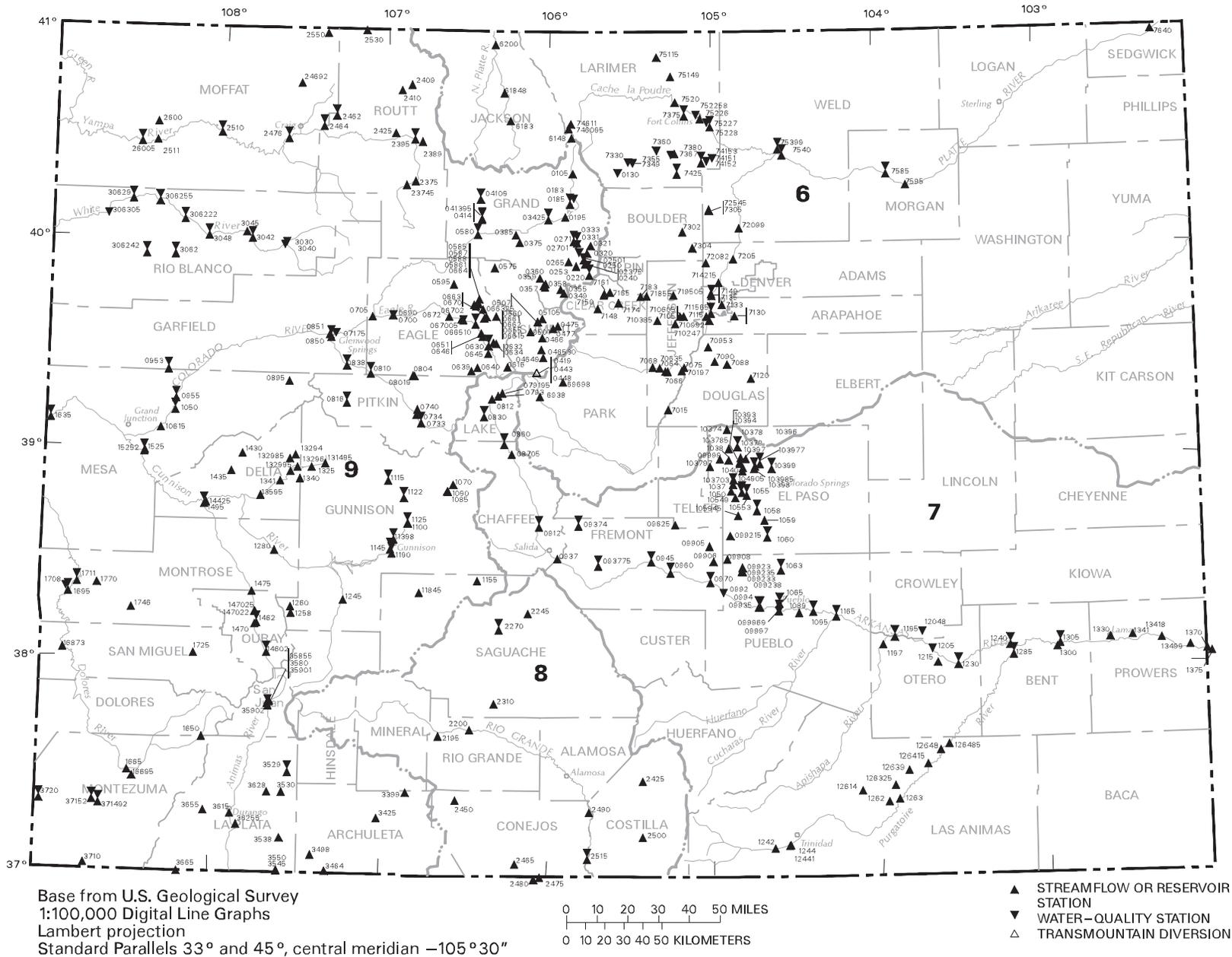


Figure 2.--Map showing locations of crest-stage partial-record stations in Colorado.

COOPERATION

The U.S. Geological Survey and organizations in the State of Colorado have had cooperative agreements for the systematic collection of surface-water records since 1895 and for water-quality records since 1941. Organizations that supported data-collection activities through cooperative agreements with the Survey during the 2002 water year are:

Arapahoe County Water and Wastewater Authority.	Evergreen Metropolitan District.
Arkansas River Compact Administration.	Fountain Valley Authority.
Centennial Water and Sanitation District.	Fremont Sanitation District.
Cherokee Metropolitan District.	Gilpin County.
City and County of Denver, Board of Water Commissioners.	Grand County.
City of Aurora.	Jefferson County Board of County Commissioners.
City of Black Hawk.	La Plata County.
City of Boulder.	Las Animas County Commissioners.
City of Brush.	Lower Fountain Water-Quality Management Association.
City and County of Broomfield.	Meeker Sanitation District.
City of Colorado Springs.	Metro Wastewater Reclamation District.
City of Craig.	Mount Crested Butte Water and Sanitation District.
City of Creede.	North Front Range Water Quality Planning Association.
City of Englewood.	Northern Colorado Water Conservancy District.
City of Fort Collins.	Northwest Colorado Council of Governments.
City of Fort Morgan.	Park County.
City of Glendale.	Plum Creek Wastewater Authority.
City of Golden.	Pueblo Board of Water Works.
City of Gunnison.	Pueblo County.
City of Idaho Springs.	Pueblo West Metropolitan District.
City of La Junta.	Rio Blanco County Board of County Commissioners.
City of Lakewood.	Rio Grande Water Conservation District.
City of Longmont.	Southeastern Colorado Water Conservancy District.
City of Louisville.	Southern Ute Indian Tribe.
City of Loveland.	Southwestern Colorado Water Conservation District.
City of Pueblo.	St. Charles Mesa Water District.
City of Westminster.	Teller - Park Soil Conservation District.
Clear Creek Board of County Commissioners.	Town of Basalt.
Colorado Department of Public Health and Environment.	Town of Breckenridge.
Colorado Division of Parks and Outdoor Recreation.	Town of Crested Butte.
Colorado Division of Water Resources.	Town of Eagle.
Colorado Division of Wildlife.	Town of Gypsum.
Colorado River Water Conservation District.	Town of Hotchkiss.
Colorado School of Mines.	Town of Meeker.
Colorado Springs Utilities.	Town of Paonia.
Colorado Water Conservation Board	Town of Rangely.
Crested Butte South Metropolitan District.	Trinchera Water Conservancy District.
Custer County.	Upper Arkansas River Water Conservancy District.
Delta County Board of County Commissioners.	Upper Eagle Regional Water Authority.
Dolores Water Conservancy District.	Upper Gunnison River Water Conservancy District.
Eagle County Board of Commissioners.	Upper Yampa Water Conservancy District.
Eagle River Water and Sanitation District.	Urban Drainage and Flood Control District.
East Grand County Water-Quality Board.	Western State College of Colorado.
El Paso County.	Wyoming State Engineer.
	Yellowjacket Water Conservancy District.

Financial assistance was also provided by the U.S. Air Force Academy; U.S. Army, Corps of Engineers; U.S. Army; Bureau of Land Management; Bureau of Reclamation; National Park Service; U.S. Fish and Wildlife Service; and U.S. Forest Service. Organizations that supplied data are acknowledged in station descriptions.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Benchmark Network is a network of 50 sites in small drainage basins around the country whose purpose is to provide consistent data on the streamflow representative of undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by human activities. At 10 of these sites, water-quality information is being gathered on major ions and nutrients, primarily to assess the effects of acid deposition on stream chemistry. Additional information on the Hydrologic Benchmark Program can be found at <http://water.usgs.gov/hbn/>.

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within the Nation's largest river basins. From 1995 through 1999, a network of approximately 40 stations was operated in the Mississippi, Columbia, Colorado, and Rio Grande basins. For the period 2000 through 2004, sampling was reduced to a few index stations on the Colorado and Columbia so that a network of 5 stations could be implemented on the Yukon River. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment Program (NAWQA); (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals. Additional information about the NASQAN Program can be found at <http://water.usgs.gov/nasqan/>.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical constituents in precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 225 precipitation chemistry monitoring sites. This long-term, nationally consistent monitoring program, coupled with ecosystem research, provides critical information toward a national scorecard to evaluate the effectiveness of ongoing and future regulations intended to reduce atmospheric emissions and subsequent impacts to the Nation's land and water resources. Reports and other information on the NADP/NTN Program, as well as all data from the individual sites, can be found at <http://bqs.usgs.gov/acidrain/>.

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources; provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in 59 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents will be measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for decision making by water-resources managers and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

Communication and coordination between USGS personnel and other local, State, and federal interests are critical components of the NAWQA Program. Each study unit has a local liaison committee consisting of representatives from key federal, State, and local water resources agencies, Indian nations, and universities in the study unit. Liaison committees typically meet semiannually to discuss their information needs, monitoring plans and progress, desired information products, and opportunities to collaborate efforts among the agencies. Additional information about the NAWQA Program can be found at <http://water.usgs.gov/nawqa/>

EXPLANATION OF THE RECORDS

The surface-water, ground-water, and precipitation records published in this report are for the 2002 water year that began on October 1, 2001, and ended September 30, 2002. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, ground-water level data, water-quality data for surface and ground water, and precipitation data. The locations of the stations where the surface-water data were collected are shown in figures 1 and 2. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each data station, whether streamsite or well, in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for wells and, in Colorado, for surface-water stations where only infrequent measurements are made.

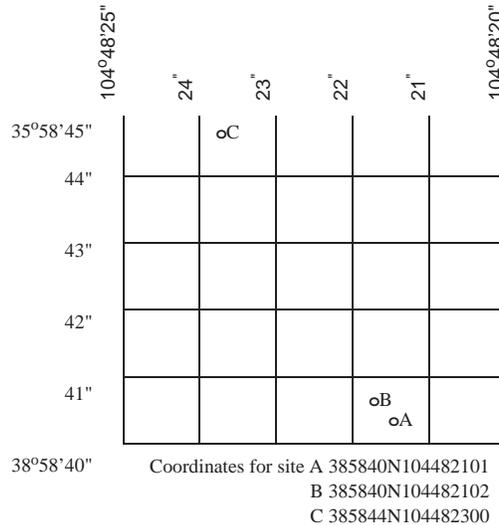
Downstream Order System

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a mainstream station are listed before that station. A station on a tributary that enters between two mainstream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary with respect to the stream to which it is immediately tributary is indicated by an indentation in the "List of Stations" in the front of this report. Each indentation represents one rank. This downstream order and system of indentation show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete eight-digit number for each station, such as 06614800, which appears just to the left of the station name, includes the two-digit Part number "06" plus the six-digit downstream-order number "614800." The Part number designates the major river basin; for example, Part "06" is the Missouri River basin.

Latitude-Longitude System

The identification numbers for wells, springs, and miscellaneous surface-water sites are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote the degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. This site-identification number, once assigned, is a pure number, and may have no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description. (See figure below).



System for numbering wells, springs, and miscellaneous sites.

The local well number locates a well within a 10-acre tract using the U. S. Bureau of Land Management system of land subdivision. The components of the local well number proceed from the largest to the smallest land subdivisions. This is in contrast to the legal description, which proceeds from the smallest to the largest land subdivision. The largest subdivision is the survey. Colorado is governed by three surveys: The Sixth Principal Meridian Survey (S), the New Mexico Survey (N), and the Ute Survey (U). Costilla County was not included in any of the above official surveys. This report follows the convention of the Costilla County Assessor in which the northern part of the county is governed by the Sixth Principal Meridian Survey and the southern part of the county is governed by a local system called the Costilla Survey (C). The first letter of the well location designates the survey.

A survey is subdivided into four quadrants formed by the intersection of the baseline and the principal meridian. The second letter of the well location designates the quadrant: A indicates the northeast quadrant, B the northwest, C the southwest, and D the southeast. A quadrant is subdivided in the north-south direction every 6 mi by townships and is divided in the east-west direction every 6 mi by ranges. The first number of the well location designates the township and the second number designates the range.

The 36-mi² area described by the township and range designation is subdivided into 1-mi² areas called sections. The sections are numbered sequentially. The third number of the well location designates the section. The section, which contains 640 acres, is subdivided into quarter sections. The 160-acre area is designated by the first letter following the section: A indicates the northeast quarter, B the northwest, C the southwest, and D the southeast. The quarter section is subdivided into quarter-quarter sections. The 40-acre area is

designated in the same manner by the second letter following the section. The 10-acre area is designated in the same manner by the third letter following the section. If more than one well is located within the 10-acre tract, the wells are numbered sequentially in the order in which they were originally inventoried. If this number is necessary, it will follow the three-letter designation.

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device through which either instantaneous or mean daily discharges may be computed for any time, or any period of time, during the period of record. Complete records of lake or reservoir content, similarly, are those for which stage or content may be computed or estimated with reasonable accuracy for any time, or period of time. They may be obtained using a continuous stage-recording device, but need not be. Because daily mean discharges and end-of-day contents commonly are published for such stations, they are referred to as "daily stations."

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles. Records of miscellaneous discharge measurements or of measurements from special studies may be considered as partial records, but they are presented separately in this report. Location of all complete-record stations for which data are given in this report are shown in figure 1.

Data Collection and Computation

The data obtained at a complete-record gaging station on a stream or canal consist of a continuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relationships between stage and discharge. These data, together with supplemental information, such as weather records, are used to compute daily discharges. The data obtained at a complete-record gaging station on a lake or reservoir consist of a record of stage and of notations regarding factors that may affect the relationship between stage and lake content. These data are used with stage-area and stage-capacity curves or tables to compute water-surface areas and lake storage.

Continuous records of stage are obtained with analog recorders that trace continuous graphs of stage, with digital recorders that punch stage values on paper tapes at selected time intervals, with electronic recorders that store stage values on computer chips at selected time intervals, or with satellite data-collection platforms that transmit near real-time data at selected time intervals to office computers. Measurements of discharge are made with current meters using methods adapted by the Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter A6.

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables indicating the approximate discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of the current-meter measurements, the curves are extended using: (1) logarithmic plotting; (2) velocity-area studies; (3) results of indirect measurements of peak discharge, such as slope-area or contracted-opening measurements, and computations of flow over dams or weirs; or (4) step-backwater techniques.

Daily mean discharges are computed by applying the daily mean stages (gage heights) to the stage-discharge curves or tables. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on the individual discharge measurements and notes of the personnel making the measurements are applied to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control. For some stations, formation of ice in the winter may obscure the stage-discharge relations that daily mean discharges must be estimated from other information such as temperature and precipitation records, notes of observations, and records for other stations in the same or nearby basins for comparable periods.

At some stream-gaging stations the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

In computing records of lake or reservoir contents, it is necessary to have available from surveys, curves, or tables defining the relationship of stage and content. The application of stage to the stage-content curves or tables gives the contents from which daily, monthly, or yearly changes then are determined. If the stage-content relationship changes because of deposition of sediment in a lake or reservoir, periodic resurveys may be necessary to redefine the relationship. Even when this is done, the contents computed may become increasingly in error as time since the last survey increases. Discharges over lake or reservoir spillways are computed from stage-discharge relationships much as other stream discharges are computed.

For some gaging stations there are periods when no gage-height record is obtained, or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated from the recorded range in stage, previous or following record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated from operator's logs, previous or following record, inflow-outflow studies, and other information. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections. "Data Presentation" (REMARKS paragraph) and "Identifying Estimated Daily Discharge."

Data Presentation

Streamflow data in this report are presented in a new format that is considerably different from the format in data reports prior to the 1992 water year. The major changes are that statistical characteristics of discharge now appear in tabular summaries following the water-year data table and less information is provided in the text or station manuscript above the table. These changes represent the results of a pilot program to reformat the annual water-data report to meet current user needs and data preferences.

The records published for each continuous-record surface-water discharge station (gaging station) now consist of four parts, the manuscript or station description and the data table of daily mean values of discharge for the current water year with summary data; a tabular statistical summary of monthly mean flow data for a designated period, by water year; and a summary statistics table that includes statistical data of annual, daily, and instantaneous flow as well as data pertaining to annual runoff, 7-day low-flow minimums, and flow duration.

Station manuscript

The manuscript provides, under various headings, descriptive information, such as station location; period of record; historical extremes outside the period of record; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow clarify information presented under the various headings of the station description.

LOCATION.--Information on locations is obtained from the most accurate maps available. The location of the gaging station with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileages, given for only a few stations, were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers.

DRAINAGE AREA.--Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage basin to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.--This indicates the period for which there are published records for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not, and whose location was such that flow at it can reasonably be considered equivalent with records from the present station.

REVISED RECORDS.--Because of new information, published records occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given.

GAGE.--The type of gage in current use, the datum of the current gage referred to sea level (see glossary), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.--All periods of estimated daily-discharge record will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily-discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a REMARKS paragraph is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, to conditions that affect natural flow at the station. In addition, information may be presented pertaining to average discharge data for the period of record; to extremes data for the period of record and the current year; and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

EXTREMES OUTSIDE PERIOD OF RECORD.--Included here is information concerning major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the U.S. Geological Survey.

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because, for these stations, there would be no current or, possibly, future station manuscript published to document the revision in a "Revised Records" entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the District office (address given on the back of the title page of this report) to determine if the published records were ever revised after the station was discontinued. Of course, if the data for a discontinued station were obtained by computer retrieval, the data would be current and there would be no need to check because any published revision of data is always accompanied by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the "Remarks" and in the inclusion of a skeleton stage-capacity table when daily contents are given.

Headings for AVERAGE DISCHARGE, EXTREMES FOR PERIOD OF RECORD, AND EXTREMES FOR CURRENT YEAR have been deleted and the information contained in these paragraphs, except for the listing of secondary instantaneous peak discharges in the EXTREMES FOR CURRENT YEAR paragraph, is now presented in the tabular summaries following the discharge table or in the REMARKS paragraph, as appropriate. No changes have been made to the data presentations of lake contents.

Data table of daily mean values

The daily table of discharge records for stream-gaging stations gives mean discharge for each day of the water year. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures for each month; the line headed "MEAN" gives the average flow in cubic feet per second during the month; and the lines headed "MAX" and "MIN" give the maximum and minimum daily mean discharges, respectively, for each month. Discharge for the month also is usually expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. In the yearly summary below the monthly summary, the figures shown are the appropriate discharges for the calendar and water years. At some stations monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversions or reservoir contents are given. These figures are identified by a symbol and corresponding footnote.

If applicable, data collected at partial-record stations follow the information for continuous-record sites. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Statistics of monthly mean data

A tabular summary of the mean (line headed "MEAN"), maximum (line headed "MAX"), and minimum (line headed "MIN") of monthly mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those figures. The designated period will be expressed as "FOR WATER YEARS _____-_____, BY WATER YEAR (WY)," and will list the first and last water years of the range of years selected from the PERIOD OF RECORD paragraph in the station manuscript. It will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript.

Summary statistics

A table titled "SUMMARY STATISTICS" follows the statistics of monthly mean data tabulation. This table consists of four columns, with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, "WATER YEARS _____-_____, " will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (see line headings below), except for the "ANNUAL 7-DAY MINIMUM" statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

The date or water year, as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. Repeated occurrences may be noted in the REMARKS paragraph of the manuscript or in footnotes. Because the designated period may not be the same as the station period record published in the manuscript, occasionally the dates of occurrence listed for the daily and instantaneous extremes in the designated-period column may not be within the selected water years listed in the heading. When this occurs, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration curve statistics and runoff data are also given. Runoff data may be omitted if there is extensive regulation or diversion of flow in the drainage basin.

The following summary statistics data, as appropriate, are provided with each continuous record of discharge. Comments to follow clarify information presented under the various line headings of the summary statistics table.

ANNUAL TOTAL.--The sum of the daily mean values of discharge for the year. At some stations the annual total discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

ANNUAL MEAN.--The arithmetic mean of the individual daily mean discharges for the year noted or for the designated period. At some stations the yearly mean discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

HIGHEST ANNUAL MEAN.--The maximum annual mean discharge occurring for the designated period.

LOWEST ANNUAL MEAN.--The minimum annual mean discharge occurring for the designated period.

HIGHEST DAILY MEAN.--The maximum daily mean discharge for the year or for the designated period.

LOWEST DAILY MEAN.--The minimum daily mean discharge for the year or for the designated period.

ANNUAL 7-DAY MINIMUM.--The lowest mean discharge for 7 consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1-March 31). The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.

MAXIMUM PEAK FLOW.-- The maximum instantaneous peak discharge occurring for the water year or designated period. Occasionally the maximum flow for a year may occur at midnight at the beginning or end of the year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak flow is given in the table and the maximum flow may be reported in a footnote or in the REMARKS paragraph in the manuscript

MAXIMUM PEAK STAGE.-- The maximum instantaneous peak stage occurring for the water year or designated period. Occasionally the maximum stage for a year may occur at midnight at the beginning or end of the year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak stage is given in the table and the maximum stage may be reported in the REMARKS paragraph in the manuscript or in a footnote. If the dates of occurrence of the maximum peak stage and maximum peak flow are different, the REMARKS paragraph in the manuscript or a footnote may be used to provide further information.

INSTANTANEOUS LOW FLOW.--The minimum instantaneous discharge occurring for the water year or for the designated period.

ANNUAL RUNOFF.--Indicates the total quantity of water in runoff for a drainage area for the year. Data reports may use any of the following units of measurement in presenting annual runoff data:

Acre-foot (AC-FT) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equal to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile area drained, assuming the runoff is distributed uniformly in time and area.

Inches (INCHES) indicates the depth to which the drainage area would be covered if all of the runoff for a given time period were uniformly distributed on it.

10 PERCENT EXCEEDS.--The discharge that has been exceeded 10 percent of the time for the designated period.

50 PERCENT EXCEEDS.--The discharge that has been exceeded 50 percent of the time for the designated period.

90 PERCENT EXCEEDS.--The discharge that has been exceeded 90 percent of the time for the designated period.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of annual maximum stage and discharge at crest-stage stations, and the second is a table of discharge measurements at low-flow partial-record stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified either by flagging individual daily values with the letter symbol "e" and printing a table footnote, "e Estimated," or by listing the dates of estimated record in the REMARKS paragraph of the station description.

Accuracy of the Records

The accuracy of streamflow records depends primarily on: (1) The stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements; and (2) the accuracy of measurements of stage, measurements of discharge, and interpretation of records.

The accuracy attributed to the records is indicated under "REMARKS." "Excellent" means that about 95 percent of the daily discharges are within 5 percent of their true value; "good," within 10 percent; and "fair," within 15 percent. Records that do not meet the criteria mentioned, are rated "poor." Different accuracies may be attributed to different parts of a given record.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for daily values less than 1 ft³/s; to the nearest tenth between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures for more than 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other Records Available

The National Water Data Exchange (NAWDEx), U.S. Geological Survey, Reston, VA 22092, maintains an index of records of discharge collected by other agencies but not published by the Geological Survey. Information on records at specific sites can be obtained from that office upon request.

Information used in the preparation of the records in this publication, such as discharge-measurement notes, gage-height records, temperature measurements, and rating tables are on file in the Colorado District office. Information on the availability of the unpublished information or on the results of statistical analyses of the published records may be obtained from the District office.

Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve a variety of types of data and measurement frequencies.

In March 1989 the National Water-Quality Laboratory discovered a bias in the turbidimetric method for sulfate analysis, indicating that values below 75 mg/L have a median positive bias of 2 mg/L above the true value for the period between 1982 and 1989.

On October 1, 1995, the Colorado District adopted a new sampling and quality-assurance protocol for sampling of surface waters (Horowitz and others, 1994). This protocol was adopted as standard operating procedure for the collection and processing of all trace-element, major-ion, nutrient, and radiochemical species in filtered, surface-water samples.

Accuracy of the Records

Accuracy of water-quality monitor records are based on: (1) The completeness of the record, (2) frequency of calibration checks, (3) the length of time and frequency that data exceed allowable error limits, (4) the magnitude of errors, and (5) confidence in the resultant shifts applied. Listed below are the limits of allowable error.

*	Temperature:	± 0.3 degree C.
*	Specific Conductance:	$\pm 5 \mu\text{S}/\text{cm}$ or $\pm 5\%$ whichever is greater
*	pH:	± 0.2 pH units
*	Dissolved Oxygen:	$\pm 0.3 \text{ mg}/\text{L}$ or $\pm 5\%$ whichever is greater.

A record is rated excellent if the allowable error limits are never exceeded, good if limits are occasionally exceeded and shifts are no greater than two times the limit, fair if limits are regularly exceeded and shifts are no greater than three times the limit, and poor for all others.

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station, where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

A careful distinction needs to be made between "continuing records" as used in this report and "continuous recordings," which refers to a continuous graph or a series of discrete values punched or recorded at short intervals on a paper tape, magnetic tape, computer chip, or some other medium. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently. Locations of stations for which records on the quality of surface water appear in this report are shown in figure 1.

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the "Supplemental Water-Quality Data For Gaging Stations" section.

Onsite Measurements and Sample Collection

In obtaining water-quality data, a major concern needs to be assuring that the data obtained represent the in situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made onsite when the samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for onsite measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-Resources Investigations," Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4; Book 9, Chap. A1-A9. All of these references are listed on pages 30 and 31 of this report. Also, detailed information on collecting, treating, and shipping samples may be obtained from the Geological Survey District office.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream Quality Accounting Network (see definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals, depends on flow conditions and other factors which must be evaluated by the collector.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the U.S.G.S. District Office whose address is given on the back of the title page of this report.

Water Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are recorded to the nearest 0.1 degree Celsius. Water temperatures measured at the time of water-discharge measurements are published in this report as supplemental water-quality for gaging stations.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow and in predicting long-term sediment discharge characteristics of the stream.

In addition to the records of suspended-sediment discharge, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included for some stations.

Miscellaneous Water-Quality Data

Miscellaneous water-quality data refers to measurements of water temperature and specific conductance that are made in streams concurrently with discharge measurements. Miscellaneous water-quality measurements typically are made at an individual point in a stream cross section. If the stream is well mixed and its chemistry is relatively uniform, a single point measurement may be sufficient to represent the stream cross section. Point measurements of water temperature and specific conductance in streams that are not well mixed may not be representative of the cross section.

Laboratory Measurements

Sediment samples, samples for biochemical-oxygen demand (BOD), samples for indicator bacteria, and daily samples for specific conductance are analyzed locally, most other samples are analyzed in the Geological Survey laboratories in Lakewood, CO. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the Geological Survey laboratories are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4.

Historical and current-year dissolved trace-element concentrations are reported herein for water that was collected, processed, and analyzed by using either ultraclean or other than ultraclean techniques. If ultraclean techniques were used, then those concentrations are reported in nanograms per liter. If other than ultraclean techniques were used, then those concentrations are reported in micrograms per liter and could reflect contamination introduced during some phase of the procedure.

Water-Quality Data Reporting Convention

The USGS National Water Quality Laboratory collects quality-control data on a continuing basis to evaluate selected analytical methods to determine long-term method detection levels (LT-MDL's) and laboratory reporting levels (LRL's). These values are re-evaluated each year on the basis of the most recent quality-control data and, consequently, may change from year to year.

This reporting procedure limits the occurrence of false positive error. The chance of falsely reporting a concentration greater than the LT-MDL for a sample in which the analyte is present is 1 percent or less. Application of the LRL limits the occurrence of false negative error. The chance of falsely reporting a non-detection for a sample in which the analyte is present at a concentration equal to or greater than the LRL is 1 percent or less.

Accordingly, concentrations are reported as <LRL for samples in which the analyte was either not detected or did not pass identification. Analytes that are detected at concentrations between the LT-MDL and LRL and that pass identification criteria are estimated. Estimated concentrations will be noted with a remark code of "E". These data should be used with the understanding that their uncertainty is greater than that of data reported without the "E" remark code.

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information, as appropriate, is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

DRAINAGE AREA.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

PERIOD OF RECORD.--This indicates the periods for which there are published water-quality records for the station. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually.

INSTRUMENTATION.--Information on instrumentation is given only if a water-quality monitor temperature record, sediment pumping sampler, or other sampling device is in operation at a station.

REMARKS.--Remarks provide added information pertinent to the collection, analysis, or computation of the records.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

EXTREMES.--Maximums and minimums are given only for parameters measured daily or more frequently. None are given for parameters measured weekly or less frequently, because the true maximums or minimums may not have been sampled. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made in the U.S. Geological Survey's distributed data system, NWIS, and subsequently to its web-based National data system, NWISWeb [<http://water.usgs.gov/nwis/nwis>]. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from NWIS or NWISWeb to ensure the most recent updates. Updates to NWISWeb are currently made on an annual basis.

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in separate tables following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Remark Codes

The following remarks codes may appear with the water-quality data in this report:

PRINTED OUTPUT REMARK

- E Estimated laboratory analysis value
- e Estimated value
- > Actual value is known to be greater than the value shown
- < Actual value is known to be less than the value shown
- K Based on non-ideal colony count
- M Presence of material verified but not quantified
- V Analyte was detected in both the environmental sample and the associated blanks.

Records of Ground-Water Quality

Records of ground-water quality in this report differ from other types of records in that for most sampling sites they consist of only one set of measurements for the water year. The quality of ground water ordinarily changes only slowly; therefore, for most general purposes one annual sampling, or only a few samples taken at infrequent intervals during the year, is sufficient. Frequent measurement of the same constituents is not necessary unless one is concerned with a particular problem, such as monitoring for trends in nitrate concentration. In the special cases where the quality of ground water may change more rapidly, more frequent measurements are made to identify the nature of the changes.

Data Collection and Computation

The records of ground-water quality in this report were obtained mostly as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some counties but none are presented for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality statewide. Such a view can be attained only by considering records for this year in context with similar records obtained for these and other counties in earlier years.

Most methods for collecting and analyzing water samples are described in the "U.S. Geological Survey Techniques of Water-Resources Investigations" manuals listed at the end of the introductory text. The values reported in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. All samples were obtained by trained personnel. The wells sampled were pumped long enough to assure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

Data Presentation

The records of ground-water quality are published in a section titled QUALITY OF GROUND WATER immediately following the ground-water-level records. Data for quality of ground water are listed alphabetically by County, and are identified by well number. The prime identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. No descriptive statements are given for ground-water-quality records; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water. The REMARK codes listed for surface-water-quality records are also applicable to ground-water-quality records.

ACCESS TO USGS WATER DATA

The USGS provides near real-time stage and discharge data for many of the gaging stations equipped with the necessary telemetry and historic daily-mean and peak-flow discharge data for most current or discontinued gaging stations through the World Wide Web (WWW). These data may be accessed at :

- | | |
|---|--------------------------|
| http://waterdata.usgs.gov/nwis | National water data page |
| http://co.water.usgs.gov | Colorado home page |

Water-quality, ground-water, and meteorological data also are available through the WWW. In addition, data can be provided in various machine-readable formats on magnetic tape or 3.5 inch floppy diskette. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division District Offices (See address on the back of the title page).

DEFINITION OF TERMS

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. Definitions of common terms such as algae, water level, and precipitation are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. See also table for converting inch/pound units to International System (SI) units on the inside of the back cover.

Acid neutralizing capacity (ANC) is the equivalent sum of all bases or base-producing materials, solutes plus particulates, in an aqueous system that can be titrated with acid to an equivalence point. This term designates titration of an "unfiltered" sample (formerly reported as alkalinity).

Acre-foot (AC-FT, acre-ft) is a unit of volume, commonly used to measure quantities of water used or stored, equivalent to the volume of water required to cover 1 acre to a depth of 1 foot and equivalent to 43,560 cubic feet, 325,851 gallons, or 1,233 cubic meters. (See also "Annual runoff")

Adenosine triphosphate (ATP) is an organic, phosphate-rich compound important in the transfer of energy in organisms. Its central role in living cells makes ATP an excellent indicator of the presence of living material in water. A measurement of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample. (See also "Biomass" and "Dry weight")

Alkalinity is the capacity of solutes in an aqueous system to neutralize acid. This term designates titration of a "filtered" sample.

Annual runoff is the total quantity of water that is discharged ("runs off") from a drainage basin in a year. Data reports may present annual runoff data as volumes in acre-feet, as discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches.

Annual 7-day minimum is the lowest mean value for any 7-consecutive-day period in a year. Annual 7-day minimum values are reported herein for the calendar year and the water year (October 1 through September 30). Most low-flow frequency analyses use a climatic year (April 1-March 31), which tends to prevent the low-flow period from being artificially split between adjacent years. The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day, 10-year low-flow statistic.)

Aroclor is the registered trademark for a group of poly-chlorinated biphenyls that were manufactured by the Monsanto Company prior to 1976. Aroclors are assigned specific 4-digit reference numbers dependent upon molecular type and degree of substitution of the biphenyl ring hydrogen atoms by chlorine atoms. The first two digits of a numbered aroclor represent the molecular type, and the last two digits represent the percentage weight of the hydrogen-substituted chlorine.

Artificial substrate is a device that is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is collected. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection. (See also "Substrate")

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500 °C for 1 hour. Ash mass of zooplankton and phytoplankton is expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2). (See also "Biomass" and "Dry mass")

Aspect is the direction toward which a slope faces with respect to the compass.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, whereas others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Bankfull stage, as used in this report, is the stage at which a stream first overflows its natural banks formed by floods with 1- to 3-year recurrence intervals.

Base discharge (for peak discharge) is a discharge value, determined for selected stations, above which peak discharge data are published. The base discharge at each station is selected so that an average of about three peak flows per year will be published. (See also "Peak flow")

Base flow is sustained flow of a stream in the absence of direct runoff. It includes natural and human-induced streamflows. Natural base flow is sustained largely by ground-water discharge.

Bedload is material in transport that is supported primarily by the streambed. In this report, bedload is considered to consist of particles in transit from the bed to an elevation equal to the top of the bedload sampler nozzle (ranging from 0.25 to 0.5 foot) that are retained in the bedload sampler. A sample collected with a pressure-differential bedload sampler also may contain a component of the suspended load.

Bedload discharge (tons per day) is the rate of sediment moving as bedload, reported as dry weight, that passes through a cross section in a given time. NOTE: Bedload discharge values in this report may include a component of the suspended-sediment discharge. A correction may be necessary when computing the total sediment discharge by summing the bedload discharge and the suspended-sediment discharge. (See also "Bedload," "Dry weight," "Sediment," and "Suspended-sediment discharge")

Bed material is the sediment mixture of which a stream-bed, lake, pond, reservoir, or estuary bottom is composed. (See also "Bedload" and "Sediment")

Benthic organisms are the group of organisms inhabiting the bottom of an aquatic environment. They include a number of types of organisms, such as bacteria, fungi, insect larvae and nymphs, snails, clams, and crayfish. They are useful as indicators of water quality.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as mass per unit area or volume of habitat.

Biomass pigment ratio is an indicator of the total proportion of periphyton that are autotrophic (plants). This is also called the Autotrophic Index.

Blue-green algae (*Cyanophyta*) are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample. (See also "Phytoplankton")

Bottom material (See "Bed material")

Bulk electrical conductivity is the combined electrical conductivity of all material within a doughnut-shaped volume surrounding an induction probe. Bulk conductivity is affected by different physical and chemical properties of the material including the dissolved solids content of the pore water and lithology and porosity of the rock.

Cells/volume refers to the number of cells of any organism that is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample volume, and are generally reported as cells or units per milliliter (mL) or liter (L).

Cells volume (biovolume) determination is one of several common methods used to estimate biomass of algae in aquatic systems. Cell members of algae are frequently used in aquatic surveys as an indicator of algal production. However, cell numbers alone cannot represent true biomass because of considerable cell-size variation among the algal species. Cell volume (μm^3) is determined by obtaining critical cell measurements or cell dimensions (for example, length, width, height, or radius) for 20 to 50 cells of each important species to obtain an average biovolume per cell. Cells are categorized according to the correspondence of their cellular shape to the nearest geometric solid or combinations of simple solids (for example, spheres, cones, or cylinders). Representative formulae used to compute biovolume are as follows:

$$\text{sphere } \frac{4}{3} \pi r^3 \quad \text{cone } \frac{1}{3} \pi r^2 h \quad \text{cylinder } \pi r^2 h.$$

pi (π) is the ratio of the circumference to the diameter of a circle; $\pi = 3.14159\dots$

From cell volume, total algal biomass expressed as biovolume ($\mu\text{m}^3/\text{mL}$) is thus determined by multiplying the number of cells of a given species by its average cell volume and then summing these volumes for all species.

Cfs-day (See "Cubic foot per second-day")

Channel bars, as used in this report, are the lowest prominent geomorphic features higher than the channel bed.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with BOD or with carbonaceous organic pollution from sewage or industrial wastes. [See also "Biochemical oxygen demand (BOD)"]

Clostridium perfringens (*C. perfringens*) is a spore-forming bacterium that is common in the feces of human and other warmblooded animals. Clostridial spores are being used experimentally as an indicator of past fecal contamination and presence of microorganisms that are resistant to disinfection and environmental stresses. (See also "Bacteria")

Coliphages are viruses that infect and replicate in coliform bacteria. They are indicative of sewage contamination of water and of the survival and transport of viruses in the environment.

Color unit is produced by 1 milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Confined aquifer is a term used to describe an aquifer containing water between two relatively impermeable boundaries. The water level in a well tapping a confined aquifer stands above the top of the confined aquifer and can be higher or lower than the water table that may be present in the material above it. In some cases, the water level can rise above the ground surface, yielding a flowing well.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Continuous-record station is a site where data are collected with sufficient frequency to define daily mean values and variations within a day.

Control designates a feature in the channel that physically affects the water-surface elevation and thereby determines the stage-discharge relation at the gage. This feature may be a constriction of the channel, a bedrock outcrop, a gravel bar, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure, as used in this report, is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of saltwater.

Cubic foot per second (CFS, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point in 1 second. It is equivalent to approximately 7.48 gallons per second or approximately 449 gallons per minute, or 0.02832 cubic meters per second. The term "second-foot" sometimes is used synonymously with "cubic foot per second" but is now obsolete.

Cubic foot per second-day (CFS-DAY, Cfs-day, $[(\text{ft}^3/\text{s})/\text{d}]$) is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.98347 acre-feet, 646,317 gallons, or 2,446.6 cubic meters. The daily mean discharges reported in the daily value data tables are numerically equal to the daily volumes in cfs-days, and the totals also represent volumes in cfs-days.

Cubic foot per second per square mile [CFSM, $(\text{ft}^3/\text{s})/\text{mi}^2$] is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming the runoff is distributed uniformly in time and area. (See also "Annual runoff")

Daily mean suspended-sediment concentration is the time-weighted concentration of suspended sediment passing a stream cross section during a 24-hour day. (See also "Sediment" and "Suspended-sediment concentration")

Daily-record station is a site where data are collected with sufficient frequency to develop a record of one or more data values per day. The frequency of data collection can range from continuous recording to periodic sample or data collection on a daily or near-daily basis.

Data collection platform (DCP) is an electronic instrument that collects, processes, and stores data from various sensors, and transmits the data by satellite data relay, line-of-sight radio, and/or landline telemetry.

Data logger is a microprocessor-based data acquisition system designed specifically to acquire, process, and store data. Data are usually downloaded from onsite data loggers for entry into office data systems.

Datum is a surface or point relative to which measurements of height and/or horizontal position are reported. A vertical datum is a horizontal surface used as the zero point for measurements of gage height, stage, or elevation; a horizontal datum is a reference for positions given in terms of latitude-longitude, State Plane coordinates, or UTM coordinates. (See also "Gage datum," "Land-surface datum," "National Geodetic Vertical Datum of 1929," and "North American Vertical Datum of 1988")

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample. (See also "Phytoplankton")

Diel is of or pertaining to a 24-hour period of time; a regular daily cycle.

Discharge, or flow, is the rate that matter passes through a cross section of a stream channel or other water body per unit of time. The term commonly refers to the volume of water (including, unless otherwise stated, any sediment or other constituents suspended or dissolved in the water) that passes a cross section in a stream channel, canal, pipeline, etc., within a given period of time (cubic feet per second). Discharge also can apply to the rate at which constituents, such as suspended sediment, bedload, and dissolved or suspended chemicals, pass through a cross section, in which cases the quantity is expressed as the mass of constituent that passes the cross section in a given period of time (tons per day).

Dissolved refers to that material in a representative water sample that passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal and State agencies that collect water-quality data. Determinations of "dissolved" constituent concentrations are made on sample water that has been filtered.

Dissolved oxygen (DO) is the molecular oxygen (oxygen gas) dissolved in water. The concentration in water is a function of atmospheric pressure, temperature, and dissolved-solids concentration of the water. The ability of water to retain oxygen decreases with increasing temperature or dissolved-solids concentration. Photosynthesis and respiration by plants commonly cause diurnal variations in dissolved-oxygen concentration in water from some streams.

Dissolved-solids concentration in water is the quantity of dissolved material in a sample of water. It is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation, the bicarbonate value, in milligrams per liter, is multiplied by 0.4926 to convert it to carbonate. Alternatively, alkalinity concentration (as mg/L CaCO₃) can be converted to carbonate concentration by multiplying by 0.60.

Diversity index (H) (Shannon index) is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = - \sum_{i=1}^s \frac{n_i}{n} \log_2 \frac{n_i}{n},$$

where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a stream at a specific location is that area upstream from the location, measured in a horizontal plane, that has a common outlet at the site for its surface runoff from precipitation that normally drains by gravity into a stream. Drainage areas given herein include all closed basins, or noncontributing areas, within the area unless otherwise specified.

Drainage basin is a part of the Earth's surface that contains a drainage system with a common outlet for its surface runoff. (See "Drainage area")

Dry mass refers to the mass of residue present after drying in an oven at 105 °C, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry-mass values are expressed in the same units as ash mass. (See also "Ash mass," "Biomass," and "Wet mass")

Dry weight refers to the weight of animal tissue after it has been dried in an oven at 65 °C until a constant weight is achieved. Dry weight represents total organic and inorganic matter in the tissue. (See also "Wet weight")

Embeddedness is the degree to which gravel-sized and larger particles are surrounded or enclosed by finer-sized particles. (See also "Substrate embeddedness class")

Enterococcus bacteria are commonly found in the feces of humans and other warmblooded animals. Although some strains are ubiquitous and not related to fecal pollution, the presence of enterococci in water is an indication of fecal pollution and the possible presence of enteric pathogens. Enterococcus bacteria are those bacteria that produce pink to red colonies with black or reddish-brown precipitate after incubation at 41 °C on mE agar (nutrient medium for bacterial growth) and subsequent transfer to EIA medium. Enterococci include *Streptococcus faecalis*, *Streptococcus faecium*, *Streptococcus avium*, and their variants. (See also "Bacteria")

EPT Index is the total number of distinct taxa within the insect orders Ephemeroptera, Plecoptera, and Trichoptera. This index summarizes the taxa richness within the aquatic insects that are generally considered pollution sensitive; the index usually decreases with pollution.

Escherichia coli (E. coli) are bacteria present in the intestine and feces of warmblooded animals. *E. coli* are a member species of the fecal coliform group of indicator bacteria. In the laboratory, they are defined as those bacteria that produce yellow or yellow-brown colonies on a filter pad saturated with urea substrate broth after primary culturing for 22 to 24 hours at 44.5 °C on mTEC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Estimated (E) concentration value is reported when an analyte is detected and all criteria for a positive result are met. If the concentration is less than the method detection limit (MDL), an 'E' code will be reported with the value. If the analyte is qualitatively identified as present, but the quantitative determination is substantially more uncertain, the National Water Quality Laboratory will identify the result with an 'E' code even though the measured value is greater than the MDL. A value reported with an 'E' code should be used with caution. When no analyte is detected in a sample, the default reporting value is the MDL preceded by a less than sign (<).

Euglenoids (*Euglenophyta*) are a group of algae that are usually free-swimming and rarely creeping. They have the ability to grow either photosynthetically in the light or heterotrophically in the dark. (See also "Phytoplankton")

Extractable organic halides (EOX) are organic compounds that contain halogen atoms such as chlorine. These organic compounds are semivolatile and extractable by ethyl acetate from air-dried streambed sediment. The ethyl acetate extract is combusted, and the concentration is determined by microcoulometric determination of the halides formed. The concentration is reported as micrograms of chlorine per gram of the dry weight of the streambed sediment.

Fecal coliform bacteria are present in the intestines or feces of warmblooded animals. They often are used as indicators of the sanitary quality of the water. In the laboratory, they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5 °C plus or minus 0.2 °C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Fecal streptococcal bacteria are present in the intestines of warmblooded animals and are ubiquitous in the environment. They are characterized as gram-positive, cocci bacteria that are capable of growth in brain-heart infusion broth. In the laboratory, they are defined as all the organisms that produce red or pink colonies within 48 hours at 35 °C plus or minus 1.0 °C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Fire algae (*Pyrrhophyta*) are free-swimming unicells characterized by a red pigment spot. (See also "Phytoplankton")

Flow-duration percentiles are values on a scale of 100 that indicate the percentage of time for which a flow is not exceeded. For example, the 90th percentile of river flow is greater than or equal to 90 percent of all recorded flow rates.

Gage datum is a horizontal surface used as a zero point for measurement of stage or gage height. This surface usually is located slightly below the lowest point of the stream bottom such that the gage height is usually slightly greater than the maximum depth of water. Because the gage datum itself is not an actual physical object, the datum usually is defined by specifying the elevations of permanent reference marks such as bridge abutments and survey monuments, and the gage is set to agree with the reference marks. Gage datum is a local datum that is maintained independently of any national geodetic datum. However, if the elevation of the gage datum relative to the national datum (North American Vertical Datum of 1988 or National Geodetic Vertical Datum of 1929) has been determined, then the gage readings can be converted to elevations above the national datum by adding the elevation of the gage datum to the gage reading.

Gage height (G.H.) is the water-surface elevation, in feet above the gage datum. If the water surface is below the gage datum, the gage height is negative. Gage height often is used interchangeably with the more general term "stage," although gage height is more appropriate when used in reference to a reading on a gage.

Gage values are values that are recorded, transmitted, and/or computed from a gaging station. Gage values typically are collected at 5-, 15-, or 30-minute intervals.

Gaging station is a site on a stream, canal, lake, or reservoir where systematic observations of stage, discharge, or other hydrologic data are obtained.

Gas chromatography/flame ionization detector (GC/FID) is a laboratory analytical method used as a screening technique for semivolatile organic compounds that are extractable from water in methylene chloride.

Geomorphic channel units, as used in this report, are fluvial geomorphic descriptors of channel shape and stream velocity. Pools, riffles, and runs are types of geomorphic channel units considered for National Water-Quality Assessment (NAWQA) Program habitat sampling.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algae mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample. (See also "Phytoplankton")

Habitat, as used in this report, includes all nonliving (physical) aspects of the aquatic ecosystem, although living components like aquatic macrophytes and riparian vegetation also are usually included. Measurements of habitat are typically made over a wider geographic scale than are measurements of species distribution.

Habitat quality index is the qualitative description (level 1) of instream habitat and riparian conditions surrounding the reach sampled. Scores range from 0 to 100 percent with higher scores indicative of desirable habitat conditions for aquatic life. Index only applicable to wadable streams.

Hardness of water is a physical-chemical characteristic that commonly is recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations (primarily calcium and magnesium) and is expressed as the equivalent concentration of calcium carbonate (CaCO₃).

High tide is the maximum height reached by each rising tide. The high-high and low-high tides are the higher and lower of the two high tides, respectively, of each tidal day. See NOAA web site: <http://www.co-ops.nos.noaa.gov/tideglos.html>

Hilsenhoff's Biotic Index (HBI) is an indicator of organic pollution that uses tolerance values to weight taxa abundances; usually increases with pollution. It is calculated as follows:

$$HBI = \frac{\sum (n)(a)}{N},$$

where n is the number of individuals of each taxon, a is the tolerance value of each taxon, and N is the total number of organisms in the sample.

Horizontal datum (See "Datum")

Hydrologic index stations referred to in this report are continuous-record gaging stations that have been selected as representative of streamflow patterns for their respective regions. Station locations are shown on index maps.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as defined by the former Office of Water Data Coordination and delineated on the State Hydrologic Unit Maps by the USGS. Each hydrologic unit is identified by an 8-digit number.

Inch (IN., in.), as used in this report, refers to the depth to which the drainage area would be covered with water if all of the runoff for a given time period were uniformly distributed on it. (See also "Annual runoff")

Instantaneous discharge is the discharge at a particular instant of time. (See also "Discharge")

Island, as used in this report, is a mid-channel bar that has permanent woody vegetation, is flooded once a year on average, and remains stable except during large flood events.

Laboratory reporting level (LRL) is generally equal to twice the yearly determined long-term method detection level (LT-MDL). The LRL controls false negative error. The probability of falsely reporting a nondetection for a sample that contained an analyte at a concentration equal to or greater than the LRL is predicted to be less than or equal to 1 percent. The value of the LRL will be reported with a "less than" (<) remark code for samples in which the analyte was not detected. The National Water Quality Laboratory (NWQL) collects quality-control data from selected analytical methods on a continuing basis to determine LT-MDLs and to establish LRLs. These values are reevaluated annually on the basis of the most current quality-control data and, therefore, may change. [Note: In several previous NWQL documents (NWQL Technical Memorandum 98.07, 1998), the LRL was called the nondetection value or NDV—a term that is no longer used.]

Land-surface datum (Isd) is a datum plane that is approximately at land surface at each ground-water observation well.

Latent heat flux (often used interchangeably with latent heat-flux density) is the amount of heat energy that converts water from liquid to vapor (evaporation) or from vapor to liquid (condensation) across a specified cross-sectional area per unit time. Usually expressed in watts per square meter.

Light-attenuation coefficient, also known as the extinction coefficient, is a measure of water clarity. Light is attenuated according to the Lambert-Beer equation:

$$I = I_0 e^{-\lambda L}$$

where I_0 is the source light intensity, I is the light intensity at length L (in meters) from the source, λ is the light-attenuation coefficient, and e is the base of the natural logarithm. The light-attenuation coefficient is defined as

$$\lambda = -\frac{1}{L} \log_e \frac{I}{I_0}$$

Lipid is any one of a family of compounds that are insoluble in water and that make up one of the principal components of living cells. Lipids include fats, oils, waxes, and steroids. Many environmental contaminants such as organochlorine pesticides are lipophilic.

Long-term method detection level (LT-MDL) is a detection level derived by determining the standard deviation of a minimum of 24 method detection limit (MDL) spike sample measurements over an extended period of time. LT-MDL data are collected on a continuous basis to assess year-to-year variations in the LT-MDL. The LT-MDL controls false positive error. The chance of falsely reporting a concentration at or greater than the LT-MDL for a sample that did not contain the analyte is predicted to be less than or equal to 1 percent.

Low tide is the minimum height reached by each falling tide. The high-low and low-low tides are the higher and lower of the two low tides, respectively, of each tidal day. See NOAA web site: <http://www.co-ops.nos.noaa.gov/tideglos.html>

Macrophytes are the macroscopic plants in the aquatic environment. The most common macrophytes are the rooted vascular plants that usually are arranged in zones in aquatic ecosystems and restricted in the area by the extent of illumination through the water and sediment deposition along the shoreline.

Mean concentration of suspended sediment (Daily mean suspended-sediment concentration) is the time-weighted concentration of suspended sediment passing a stream cross section during a given time period. (See also "Daily mean suspended-sediment concentration" and "Suspended-sediment concentration")

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period. (See also "Discharge")

Mean high or low tide is the average of all high or low tides, respectively, over a specific period.

Mean sea level is a local tidal datum. It is the arithmetic mean of hourly heights observed over the National Tidal Datum Epoch. Shorter series are specified in the name; for example, monthly mean sea level and yearly mean sea level. In order that they may be recovered when needed, such datums are referenced to fixed points known as benchmarks. (See also "Datum")

Measuring point (MP) is an arbitrary permanent reference point from which the distance to water surface in a well is measured to obtain water level.

Membrane filter is a thin microporous material of specific pore size used to filter bacteria, algae, and other very small particles from water.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

Method detection limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99-percent confidence that the analyte concentration is greater than zero. It is determined from the analysis of a sample in a given matrix containing the analyte. At the MDL concentration, the risk of a false positive is predicted to be less than or equal to 1 percent.

Methylene blue active substances (MBAS) are apparent detergents. The determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

Micrograms per gram (UG/G, $\mu\text{g/g}$) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

Micrograms per kilogram (UG/KG, $\mu\text{g}/\text{kg}$) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the constituent per unit mass (kilogram) of the material analyzed. One microgram per kilogram is equivalent to 1 part per billion.

Micrograms per liter (UG/L, $\mu\text{g}/\text{L}$) is a unit expressing the concentration of chemical constituents in water as mass (micrograms) of constituent per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter. One microgram per liter is equivalent to 1 part per billion.

Microsiemens per centimeter (US/CM, $\mu\text{S}/\text{cm}$) is a unit expressing the amount of electrical conductivity of a solution as measured between opposite faces of a centimeter cube of solution at a specified temperature. Siemens is the International System of Units nomenclature. It is synonymous with mhos and is the reciprocal of resistance in ohms.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in water as the mass (milligrams) of constituent per unit volume (liter) of water. Concentration of suspended sediment also is expressed in milligrams per liter and is based on the mass of dry sediment per liter of water-sediment mixture.

Minimum reporting level (MRL) is the smallest measured concentration of a constituent that may be reliably reported by using a given analytical method.

Miscellaneous site, miscellaneous station, or miscellaneous sampling site is a site where streamflow, sediment, and/or water-quality data or water-quality or sediment samples are collected once, or more often on a random or discontinuous basis to provide better areal coverage for defining hydrologic and water-quality conditions over a broad area in a river basin.

Most probable number (MPN) is an index of the number of coliform bacteria that, more probably than any other number, would give the results shown by the laboratory examination; it is not an actual enumeration. MPN is determined from the distribution of gas-positive cultures among multiple inoculated tubes.

Multiple-plate samplers are artificial substrates of known surface area used for obtaining benthic invertebrate samples. They consist of a series of spaced, hardboard plates on an eyebolt.

Nanograms per liter (NG/L, ng/L) is a unit expressing the concentration of chemical constituents in solution as mass (nanograms) of solute per unit volume (liter) of water. One million nanograms per liter is equivalent to 1 milligram per liter.

National Geodetic Vertical Datum of 1929 (NGVD of 1929) is a fixed reference adopted as a standard geodetic datum for elevations determined by leveling. It was formerly called "Sea Level Datum of 1929" or "mean sea level." Although the datum was derived from the mean sea level at 26 tide stations, it does not necessarily represent local mean sea level at any particular place. See *NOAA web site: <http://www.ngs.noaa.gov/faq.shtml#WhatVD29VD88>* (See "North American Vertical Datum of 1988")

Natural substrate refers to any naturally occurring immersed or submersed solid surface, such as a rock or tree, upon which an organism lives. (See also "Substrate")

Nekton are the consumers in the aquatic environment and consist of large free-swimming organisms that are capable of sustained, directed mobility.

Nephelometric turbidity unit (NTU) is the measurement for reporting turbidity that is based on use of a standard suspension of formazin. Turbidity measured in NTU uses nephelometric methods that depend on passing specific light of a specific wavelength through the sample.

North American Vertical Datum of 1988 (NAVD 1988) is a fixed reference adopted as the official civilian vertical datum for elevations determined by Federal surveying and mapping activities in the United States. This datum was established in 1991 by minimum-constraint adjustment of the Canadian, Mexican, and United States first-order terrestrial leveling networks.

Open or screened interval is the length of unscreened opening or of well screen through which water enters a well, in feet below land surface.

Organic carbon (OC) is a measure of organic matter present in aqueous solution, suspension, or bottom sediment. May be reported as dissolved organic carbon (DOC), particulate organic carbon (POC), or total organic carbon (TOC).

Organic mass or **volatile mass** of a living substance is the difference between the dry mass and ash mass and represents the actual mass of the living matter. Organic mass is expressed in the same units as for ash mass and dry mass. (See also "Ash mass," "Biomass," and "Dry mass")

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter (m^2), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

Organochlorine compounds are any chemicals that contain carbon and chlorine. Organochlorine compounds that are important in investigations of water, sediment, and biological quality include certain pesticides and industrial compounds.

Parameter code is a 5-digit number used in the USGS computerized data system, National Water Information System (NWIS), to uniquely identify a specific constituent or property.

Partial-record station is a site where discrete measurements of one or more hydrologic parameters are obtained over a period of time without continuous data being recorded or computed. A common example is a crest-stage gage partial-record station at which only peak stages and flows are recorded.

Particle size is the diameter, in millimeters (mm), of a particle determined by sieve or sedimentation methods. The sedimentation method utilizes the principle of Stokes law to calculate sediment particle sizes. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube, sedigraph) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification, as used in this report, agrees with the recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay	>0.00024 - 0.004	Sedimentation
Silt	>0.004 - 0.062	Sedimentation
Sand	>0.062 - 2.0	Sedimentation/sieve
Gravel	>2.0 - 64.0	Sieve
Cobble	>64 - 256	Manual measurement
Boulder	>256	Manual measurement

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. For the sedimentation method, most of the organic matter is removed, and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native water analysis.

Peak flow (peak stage) is an instantaneous local maximum value in the continuous time series of streamflows or stages, preceded by a period of increasing values and followed by a period of decreasing values. Several peak values ordinarily occur in a year. The maximum peak value in a year is called the annual peak; peaks lower than the annual peak are called secondary peaks. Occasionally, the annual peak may not be the maximum value for the year; in such cases, the maximum value occurs at midnight at the beginning or end of the year, on the recession from or rise toward a higher peak in the adjoining year. If values are recorded at a discrete series of times, the peak recorded value may be taken as an approximation of the true peak, which may occur between the recording instants. If the values are recorded with finite precision, a sequence of equal recorded values may occur at the peak; in this case, the first value is taken as the peak.

Percent composition or **percent of total** is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, weight, mass, or volume.

Percent shading is a measure of the amount of sunlight potentially reaching the stream. A clinometer is used to measure left and right bank canopy angles. These values are added together, divided by 180, and multiplied by 100 to compute percentage of shade.

Periodic-record station is a site where stage, discharge, sediment, chemical, physical, or other hydrologic measurements are made one or more times during a year but at a frequency insufficient to develop a daily record.

Periphyton is the assemblage of microorganisms attached to and living upon submerged solid surfaces. Although primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton are useful indicators of water quality.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

pH of water is the negative logarithm of the hydrogen-ion activity. Solutions with pH less than 7.0 standard units are termed "acidic," and solutions with a pH greater than 7.0 are termed "basic." Solutions with a pH of 7.0 are neutral. The presence and concentration of many dissolved chemical constituents found in water are affected, in part, by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms also are affected, in part, by the hydrogen-ion activity of water.

Phytoplankton is the plant part of the plankton. They are usually microscopic, and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment and commonly are known as algae. (See also "Plankton")

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactive nuclide represented by a curie (Ci). A curie is the quantity of radioactive nuclide that yields 3.7×10^{10} radioactive disintegrations per second (dps). A picocurie yields 0.037 dps, or 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Polychlorinated naphthalenes (PCNs) are industrial chemicals that are mixtures of chlorinated naphthalene compounds. They have properties and applications similar to polychlorinated biphenyls (PCBs) and have been identified in commercial PCB preparations.

Pool, as used in this report, is a small part of a stream reach with little velocity, commonly with water deeper than surrounding areas.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photo-synthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated (carbon method) by the plants.

Primary productivity (carbon method) is expressed as milligrams of carbon per area per unit time [$\text{mg C}/(\text{m}^2/\text{time})$] for periphyton and macrophytes or per volume [$\text{mg C}/(\text{m}^3/\text{time})$] for phytoplankton. The carbon method defines the amount of carbon dioxide consumed as measured by radioactive carbon (carbon-14). The carbon-14 method is of greater sensitivity than the oxygen light and dark bottle method and is preferred for use with unenriched water samples. Unit time may be either the hour or day, depending on the incubation period. (See also "Primary productivity")

Primary productivity (oxygen method) is expressed as milligrams of oxygen per area per unit time [$\text{mg O}/(\text{m}^2/\text{time})$] for periphyton and macrophytes or per volume [$\text{mg O}/(\text{m}^3/\text{time})$] for phytoplankton. The oxygen method defines production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary produc-

tion is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period. (See also "Primary productivity")

Radioisotopes are isotopic forms of elements that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus; for example, ordinary chlorine is a mixture of isotopes having atomic weights of 35 and 37, and the natural mixture has an atomic weight of about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron. There are 275 isotopes of the 81 stable elements, in addition to more than 800 radioactive isotopes.

Reach, as used in this report, is a length of stream that is chosen to represent a uniform set of physical, chemical, and biological conditions within a segment. It is the principal sampling unit for collecting physical, chemical, and biological data.

Recoverable from bed (bottom) material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results. (See also "Bed material")

Recurrence interval, also referred to as return period, is the average time, usually expressed in years, between occurrences of hydrologic events of a specified type (such as exceedances of a specified high flow or nonexceedance of a specified low flow). The terms "return period" and "recurrence interval" do not imply regular cyclic occurrence. The actual times between occurrences vary randomly, with most of the times being less than the average and a few being substantially greater than the average. For example, the 100-year flood is the flow rate that is exceeded by the annual maximum peak flow at intervals whose average length is 100 years (that is, once in 100 years, on average); almost two-thirds of all exceedances of the 100-year flood occur less than 100 years after the previous exceedance, half occur less than 70 years after the previous exceedance, and about one-eighth occur more than 200 years after the previous exceedance. Similarly, the 7-day, 10-year low flow ($7Q_{10}$) is the flow rate below which the annual minimum 7-day-mean flow dips at intervals whose average length is 10 years (that is, once in 10 years, on average); almost two-thirds of the nonexceedances of the $7Q_{10}$ occur less than 10 years after the previous nonexceedance, half occur less than 7 years after, and about one-eighth occur more than 20 years after the previous nonexceedance. The recurrence interval for annual events is the reciprocal of the annual probability of occurrence. Thus, the 100-year flood has a 1-percent chance of being exceeded by the maximum peak flow in any year, and there is a 10-percent chance in any year that the annual minimum 7-day-mean flow will be less than the $7Q_{10}$.

Replicate samples are a group of samples collected in a manner such that the samples are thought to be essentially identical in composition.

Return period (See "Recurrence interval")

Riffle, as used in this report, is a shallow part of the stream where water flows swiftly over completely or partially submerged obstructions to produce surface agitation.

River mileage is the curvilinear distance, in miles, measured upstream from the mouth along the meandering path of a stream channel in accordance with Bulletin No. 14 (October 1968) of the Water Resources Council and typically is used to denote location along a river.

Run, as used in this report, is a relatively shallow part of a stream with moderate velocity and little or no surface turbulence.

Runoff is the quantity of water that is discharged ("runs off") from a drainage basin during a given time period. Runoff data may be presented as volumes in acre-feet, as mean discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches. (See also "Annual runoff")

Sea level, as used in this report, refers to one of the two commonly used national vertical datums (NGVD 1929 or NAVD 1988). See separate entries for definitions of these datums.

Sediment is solid material that originates mostly from disintegrated rocks; when transported by, suspended in, or deposited from water, it is referred to as "fluvial sediment." Sediment includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are affected by environmental and land-use factors. Some major factors are topography, soil characteristics, land cover, and depth and intensity of precipitation.

Sensible heat flux (often used interchangeably with latent sensible heat-flux density) is the amount of heat energy that moves by turbulent transport through the air across a specified cross-sectional area per unit time and goes to heating (cooling) the air. Usually expressed in watts per square meter.

Seven-day, 10-year low flow ($7Q_{10}$) is the discharge below which the annual 7-day minimum flow falls in 1 year out of 10 on the long-term average. The recurrence interval of the $7Q_{10}$ is 10 years; the chance that the annual 7-day minimum flow will be less than the $7Q_{10}$ is 10 percent in any given year. (See also "Annual 7-day minimum" and "Recurrence interval")

Shelves, as used in this report, are streambank features extending nearly horizontally from the flood plain to the lower limit of persistent woody vegetation.

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Sodium hazard in water is an index that can be used to evaluate the suitability of water for irrigating crops.

Soil heat flux (often used interchangeably with soil heat-flux density) is the amount of heat energy that moves by conduction across a specified cross-sectional area of soil per unit time and goes to heating (or cooling) the soil. Usually expressed in watts per square meter.

Soil-water content is the water lost from the soil upon drying to constant mass at 105 °C; expressed either as mass of water per unit mass of dry soil or as the volume of water per unit bulk volume of soil.

Specific electrical conductance (conductivity) is a measure of the capacity of water (or other media) to conduct an electrical current. It is expressed in microsiemens per centimeter at 25 °C. Specific electrical conductance is a function of the types and quantity of dissolved substances in water and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is from 55 to 75 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stable isotope ratio (per MIL) is a unit expressing the ratio of the abundance of two radioactive isotopes. Isotope ratios are used in hydrologic studies to determine the age or source of specific water, to evaluate mixing of different water, as an aid in determining reaction rates, and other chemical or hydrologic processes.

Stage (See "Gage height")

Stage-discharge relation is the relation between the water-surface elevation, termed stage (gage height), and the volume of water flowing in a channel per unit time.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lives.

Substrate embeddedness class is a visual estimate of riffle streambed substrate larger than gravel that is surrounded or covered by fine sediment (<2mm, sand or finer). Below are the class categories expressed as the percentage covered by fine sediment:

0	no gravel or larger substrate	3	26-50 percent
1	> 75 percent	4	5-25 percent
2	51-75 percent	5	< 5 percent

Surface area of a lake is that area (acres) encompassed by the boundary of the lake as shown on USGS topographic maps, or other available maps or photographs. Because surface area changes with lake stage, surface areas listed in this report represent those determined for the stage at the time the maps or photographs were obtained.

Surficial bed material is the upper surface (0.1 to 0.2 foot) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is defined operationally as the material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative suspended water-sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results. Determinations of "suspended, recoverable" constituents are made either by directly analyzing the suspended material collected on the filter or, more commonly, by difference, on the basis of determinations of (1) dissolved and (2) total recoverable concentrations of the constituent. (See also "Suspended")

Suspended sediment is the sediment maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid. (See also "Sediment")

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 foot above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). The analytical technique uses the mass of all of the sediment and the net weight of the water-sediment mixture in a sample to compute the suspended-sediment concentration. (See also "Sediment" and "Suspended sediment")

Suspended-sediment discharge (tons/d) is the rate of sediment transport, as measured by dry mass or volume, that passes a cross section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft³/s) x 0.0027. (See also "Sediment," "Suspended sediment," and "Suspended-sediment concentration")

Suspended-sediment load is a general term that refers to a given characteristic of the material in suspension that passes a point during a specified period of time. The term needs to be qualified, such as "annual suspended-sediment load" or "sand-size suspended-sediment load," and so on. It is not synonymous with either suspended-sediment discharge or concentration. (See also "Sediment")

Suspended, total is the total amount of a given constituent in the part of a water-sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. Knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total." Determinations of "suspended, total" constituents are made either by directly analyzing portions of the suspended material collected on the filter or, more commonly, by difference, on the basis of determinations of (1) dissolved and (2) total concentrations of the constituent. (See also "Suspended")

Suspended solids, total residue at 105 °C concentration is the concentration of inorganic and organic material retained on a filter, expressed as milligrams of dry material per liter of water (mg/L). An aliquot of the sample is used for this analysis.

Synoptic studies are short-term investigations of specific water-quality conditions during selected seasonal or hydro-logic periods to provide improved spatial resolution for critical water-quality conditions. For the period and conditions sampled, they assess the spatial distribution of selected water-quality conditions in relation to causative factors, such as land use and contaminant sources.

Taxa (Species) richness is the number of species (taxa) present in a defined area or sampling unit.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata*, is the following:

Kingdom: Animal
 Phylum: Arthropoda
 Class: Insecta
 Order: Ephemeroptera
 Family: Ephemeridae
 Genus: *Hexagenia*
 Species: *Hexagenia limbata*

Thalweg is the line formed by connecting points of minimum streambed elevation (deepest part of the channel).

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table descriptions and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water resulting from the mixing of flow proportionally to the duration of the concentration.

Tons per acre-foot (T/acre-ft) is the dry mass (tons) of a constituent per unit volume (acre-foot) of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

Tons per day (T/DAY, tons/d) is a common chemical or sediment discharge unit. It is the quantity of a substance in solution, in suspension, or as bedload that passes a stream section during a 24-hour period. It is equivalent to 2,000 pounds per day, or 0.9072 metric tons per day.

Total is the amount of a given constituent in a representative whole-water (unfiltered) sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined at least 95 percent of the constituent in the sample.)

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. This group includes coliforms that inhabit the intestine of warm-blooded animals and those that inhabit soils. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria that ferment lactose with gas formation within 48 hours at 35 °C. In the laboratory, these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35 °C plus or minus 1.0 °C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 milliliters of sample. (See also "Bacteria")

Total discharge is the quantity of a given constituent, measured as dry mass or volume, that passes a stream cross section per unit of time. When referring to constituents other than water, this term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

Total in bottom material is the amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

Total length (fish) is the straight-line distance from the anterior point of a fish specimen's snout, with the mouth closed, to the posterior end of the caudal (tail) fin, with the lobes of the caudal fin squeezed together.

Total load refers to all of a constituent in transport. When referring to sediment, it includes suspended load plus bed load.

Total organism count is the number of organisms collected and enumerated in any particular sample. (See also "Organism count/volume")

Total recoverable is the amount of a given constituent in a whole-water sample after a sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data for whole-water samples, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures may produce different analytical results.

Total sediment discharge is the mass of suspended-sediment plus bed-load transport, measured as dry weight, that passes a cross section in a given time. It is a rate and is reported as tons per day. (See also "Bedload," "Bedload discharge," "Sediment," "Suspended sediment," and "Suspended-sediment concentration")

Total sediment load or total load is the sediment in transport as bedload and suspended-sediment load. The term may be qualified, such as "annual suspended-sediment load" or "sand-size suspended-sediment load," and so on. It differs from total sediment discharge in that load refers to the material, whereas discharge refers to the quantity of material, expressed in units of mass per unit time. (See also "Sediment," "Suspended-sediment load," and "Total load")

Transect, as used in this report, is a line across a stream perpendicular to the flow and along which measurements are taken, so that morphological and flow characteristics along the line are described from bank to bank. Unlike a cross section, no attempt is made to determine known elevation points along the line.

Turbidity is the reduction in the transparency of a solution due to the presence of suspended and some dissolved substances. The measurement technique records the collective optical properties of the solution that cause light to be scattered and attenuated rather than transmitted in straight lines; the higher the intensity of scattered or attenuated light, the higher the value of the turbidity. Turbidity is expressed in nephelometric turbidity units (NTU). Depending on the method used, the turbidity units as NTU can be defined as the intensity of light of a specified wavelength scattered or attenuated by suspended particles or absorbed at a method specified angle, usually 90 degrees, from the path of the incident light. Currently approved methods for the measurement of turbidity in the USGS include those that conform to U.S. EPA Method 180.1, ASTM D1889-00, and ISO 7027. Measurements of turbidity by these different methods and different instruments are unlikely to yield equivalent values.

Ultraviolet (UV) absorbance (absorption) at 254 or 280 nanometers is a measure of the aggregate concentration of the mixture of UV absorbing organic materials dissolved in the analyzed water, such as lignin, tannin, humic substances, and various aromatic compounds. UV absorbance (absorption) at 254 or 280 nanometers is measured in UV absorption units per centimeter of pathlength of UV light through a sample.

Unconfined aquifer is an aquifer whose upper surface is a water table free to fluctuate under atmospheric pressure. (See "Water-table aquifer")

Vertical datum (See "Datum")

Volatile organic compounds (VOCs) are organic compounds that can be isolated from the water phase of a sample by purging the water sample with inert gas, such as helium, and subsequently analyzed by gas chromatography. Many VOCs are human-made chemicals that are used and produced in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants. They are often components of fuels, solvents, hydraulic fluids, paint thinners, and dry cleaning agents commonly used in urban settings. VOC contamination of drinking-water supplies is a human health concern because many are toxic and are known or suspected human carcinogens.

Water table is that surface in a ground-water body at which the water pressure is equal to the atmospheric pressure.

Water-table aquifer is an unconfined aquifer within which the water table is found.

Water year in USGS reports dealing with surface-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 2002, is called the "2002 water year."

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports. (WRD was used as an abbreviation for "Water-Resources Data" in reports published prior to 1976.)

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

Wet mass is the mass of living matter plus contained water. (See also "Biomass" and "Dry mass")

Wet weight refers to the weight of animal tissue or other substance including its contained water. (See also "Dry weight")

WSP is used as an acronym for "Water-Supply Paper" in reference to previously published reports.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and often are large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers. (See also "Plankton")

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WATER RESOURCES DATA - COLORADO, 2002
DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE ONLY STATIONS

The following continuous-record surface-water discharge or stage-only stations (gaging stations) in Colorado have been discontinued or converted to partial-record stations. Daily streamflow or stage records were collected and published for the period of record, expressed in water years, shown for each station. [--, data unavailable]

Station name	Station number	Drainage area (sq mi)	Period of record (water years)
Colorado Creek near Spicer, CO	06611000	25.8	1950-55
Grizzly Creek near Spicer, CO	06611100	118	1976-80
Buffalo Creek near Hebron, CO	06611200	56.3	1976-80
Grizzly Creek near Hebron, CO	06611300	223	1976-80
Grizzly Creek near Walden, CO	06611500	258	1904-05, 1923, 1926-47
Little Grizzly Creek near Coalmont, CO	06611700	10.1	1967-73
Little Grizzly Creek above Coalmont, CO	06611800	35.4	1976-80
Little Grizzly Creek above Hebron, CO	06611900	52.2	1976-80
Little Grizzly Creek near Hebron, CO	06612000	98.6	1904-05, 1931-45
Roaring Fork near Walden, CO	06612500	79.1	1904-05, 1923-47
North Platte River near Walden, CO	06613000	469	1904-05, 1923-47
North Fork North Platte River near Walden, CO	06614000	160	1923-28, 1936-45
South Fork Michigan River near Gould, CO	06615000	11.4	1950-58
Michigan River near Lindland, CO	06615500	60.9	1931-41
North Fork Michigan River near Gould, CO	06616000	20.5	1950-82
Michigan River at Walden, CO	06617100	182	1904-05, 1923-47
Illinois Creek near Rand, CO	06617500	70.6	1931-40
Willow Creek near Rand, CO	06618000	55.9	1931-40
Illinois Creek at Walden, CO	06618500	259	1923-47
Michigan River near Cowdrey, CO	06619000	478	1904-05, 1937-47
Canadian River near Lindland, CO	06619400	44.0	1978-83
Bush Draw near Walden, CO	06619415	4.10	1980-83
Williams Draw near Walden, CO	06619420	3.95	1979-83
Canadian River near Brownlee, CO	06619450	158	1978-83
Canadian River at Cowdrey, CO	06619500	181	1904-05, 1929-31, 1937-47
Laramie River near Glendevey, CO	06657500	101	1904-05, 1910-82
Middle Fork South Platte River above Fairplay, CO	06693980	62.2	1978-80
Middle Fork South Platte River near Hartsel, CO	06694100	250	1978-80
South Fork South Platte River above Fairplay, CO	06694400	50.3	1978-80
Fourmile Creek near Fairplay, CO	06694700	12.0	1978-80
Elevenmile Canyon Reservoir	06695500	963	1932-98
South Platte River near Lake George, CO	06696000	963	1929-98
South Platte River at Lake George, CO	06696200	1,084	1910-11, 1929
Tarryall Creek below Park Gulch near Como, CO	06697100	76.1	1997-2001
French Creek near Jefferson, CO	06697200	4.63	1986-90
Michigan Creek above Jefferson, CO	06697450	23.1	1978-86
Jefferson Creek near Jefferson, CO	06698000	11.8	1910-12, 1978-86
Tarryall Creek near Jefferson, CO	06698500	183	1910-11, 1912-17, 1977-81
Rock Creek near Jefferson, CO	06699000	45.5	1986-90
Tarryall Creek below Rock Creek, near Jefferson, CO	06699005	230	1983-97
Tarryall Creek near Lake George, CO	06699500	434	1910-12, 1925-55
Goose Creek above Cheesman Lake, CO	06700500	86.6	1899, 1924-82
Cheesman Lake	06701000	1,752	1900-98
South Platte River above North Fork at South Platte, CO	06702000	2,098	1905-12

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE ONLY STATIONS (Continued)

The following continuous-record surface-water discharge or stage-only stations (gaging stations) in Colorado have been discontinued or converted to partial-record stations. Daily streamflow or stage records were collected and published for the period of record, expressed in water years, shown for each station. [--, data unavailable]

Station name	Station number	Drainage area (sq mi)	Period of record (water years)
North Fork South Platte River at Grant, CO	06702500	49.0	1910-17
Duck Creek near Grant, CO	06704500	7.78	1995-97
Geneva Creek at Grant, CO	06705500	74.6	1908-18 1995-97
North Fork South Platte River below Geneva Creek, at Grant, CO	06706000	127	1908-13, 1942-98
North Fork South Platte River at Pine, CO	06706500	374	1942-46
Miller Gulch near Buffalo Creek, CO	06706600	3.16	2000-02
North Fork South Platte River at South Platte, CO	06707000	479	1909-10, 1913-82
South Platte River at Waterton, CO	06708000	2,621	1926-80
East Plum Creek at Castle Rock, CO	06708750	102	1985-89
Plum Creek near Louviers, CO	06709500	302	1947-90
Chatfield Lake near Littleton, CO	06709600	3,018	1975-98
South Platte River at Littleton, CO	06710000	3,069	1941-86
South Platte River at Union Avenue, at Englewood, CO	06710245	3,043	1989-95
Turkey Creek near Indian Hills, CO	06710992	45.9	2001-02
Turkey Creek at mouth of canyon near Morrison, CO	06710995	47.4	1998-2001
Turkey Creek above Bear Creek Lake, near Morrison, CO	06711040	50.6	1986-89
Little Dry Creek at Greenwood Village, CO	06711545	14.4	1994-97
South Platte River at Florida Avenue, at Denver, CO	06711590	--	1981-82
Cherry Creek near Melvin, CO	06712500	360	1939-69
Cherry Creek Lake near Denver, CO	06712990	385	1960-98
South Platte River at 50th Avenue at Denver, CO	06714130	3,810	1980-81
Senac Creek at North Border Sludge Area, near Aurora, CO	06714220	7.81	1989-93
South Clear Creek above Lower Cabin Creek Reservoir, near Georgetown, CO	06714400	--	1996-97
South Clear Creek above Leavenworth Creek, near Georgetown, CO	06714600	16.0	1995-97
West Fork Clear Creek above Empire, CO	06715500	40.5	1942-46
West Fork Clear Creek near Empire, CO	06716000	58.2	1929-31
Clear Creek below Idaho Springs, CO	06718000	259	1951-55
North Clear Creek near Blackhawk, CO	06718500	52.2	1951-55
Clear Creek at Forks Creek, CO	06719000	339	1899-1912
Clear Creek near Golden, CO	06719500	399	1908-09, 1911-74
Clear Creek at Tabor Street, at Lakewood, CO	06719526	427	1981-83
Ralston Creek near Plainview, CO	06719725	36.9	1983-84
Schwartzwalder Mine Effluent near Plainview, CO	06719730	--	1983-84
Ralston Creek below Schwartzwalder Mine near Plainview, CO	06719735	38.9	1983-84
Ralston Creek above Ralston Reservoir near Golden, CO	06719740	42.7	1983-84
Clear Creek at Mouth near Derby, CO	06720000	575	1914, 1927-82
Grange Hall Creek at Grant Park at Northglenn, CO	06720330	--	1978-79
Grange Hall Creek at Northglenn, CO	06720415	3.08	1978-81
Grange Hall Creek below Northglenn, CO	06720417	--	1981-82
First Creek below Buckley Road, near Rocky Mountain Arsenal, CO	06720460	26.4	1992-94
First Creek at Highway 2, near Rocky Mountain Arsenal, CO	06720490	39.0	1992-94
Woman Creek near Plainview, CO	06720690	--	1973-74
South Platte River at Fort Lupton, CO	06721000	5,010	1906, 1929-57
North Saint Vrain Creek near Allens Park, CO	06721500	32.6	1926-30, 1987-97
North Saint Vrain Creek at Longmont Dam near Lyons, CO	06722000	106	1925-53
South Saint Vrain Creek near Ward, CO	06722500	14.4	1925-27, 1928-31, 1954-73
Middle Saint Vrain Creek near Raymond, CO	06722900	16.8	1956-58
Middle Saint Vrain Creek near Allens Park, CO	06723000	28.0	1925-30, ^a
South Saint Vrain Creek above Lyons, CO	06723400	81.4	1971-80
St. Vrain Creek at Lyons, CO	06724000	212	1887-1895 1895-1998
Lefthand Creek near Boulder, CO	06724500	52.0	1929-31, 1947-53, 1976-80

WATER RESOURCES DATA - COLORADO, 2002
DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE ONLY STATIONS (Continued)

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Station name	Station number	Drainage area (sq mi)	Period of record (water years)
Lefthand Creek at Mouth at Longmont, CO	06725000	72.0	1927-42, 1953-55, 1976-79
Saint Vrain Creek near Longmont, CO	06725100	370	1964-68
North Boulder Creek at Silver Lake, CO	06726000	8.70	1913-32
North Boulder Creek near Nederland, CO	06726500	30.4	1929-31
Bummers Gulch near El Vado, CO	06726900	3.87	1983-95
Fourmile Creek at Orodell, CO	06727500	24.1	1947-53, 1983-95
South Boulder Creek near Rollinsville, CO	06729000	42.7	1910-18, 1945-49
South Boulder Creek at Pinecliff, CO	06729300	72.7	1979-80
Coal Creek near Plainview, CO	06730300	15.1	1959-82
Boulder Creek at Mouth near Longmont, CO	06730500	439	1927-49, 1951-55, 1978-90
St. Vrain Creek at Mouth near Platteville, CO	06731000	976	1904-06, 1915, 1927-98
Boulder Brook near Estes Park, CO	06731800	3.83	1968-70
Glacier Creek near Estes Park, CO	06732000	20.8	1941-57, 1968-70
Beaver Brook near Estes Park, CO	06732300	1.49	1968-70
Fall River at Estes Park, CO	06732500	39.8	1945-53 ^a
Big Thompson River at Estes Park, CO	06733000	137	1946-98
Fish Creek near Estes Park, CO	06734500	15.8	1947-55
North Fork Big Thompson River at Drake, CO	06736000	85.1	1947-55
Big Thompson River below Power House near Drake, CO	06736500	278	1917-55
Dry Creek near Pinewood, CO	06740000	7.11	1950-52
Cottonwood Creek near Pinewood, CO	06741000	14.7	1947-53
Big Thompson River near Loveland, CO	06741500	505	1947-55
Little Thompson River near Berthoud, CO	06742000	100	1929-30, 1947-61
Little Thompson River at Milliken, CO	06743500	199	1951-55
Big Thompson River at Mouth near La Salle, CO	06744000	830	1914-15, 1927-82
Cache La Poudre River above Chambers Lake Outlet, CO	06745000	89.7	1929-31
Joe Wright Creek near Cameron Pass, CO	06746100	5.05	1974-78
Cache La Poudre River near Rustic, CO	06747500	198	1956-68
Cache La Poudre River near Log Cabin, CO	06748000	234	1909-11, 1929-31
Fall Creek near Rustic, CO	06748200	3.59	1960-73
South Fork Cache La Poudre near Eggers, CO	06748500	70.6	1929-31
Little Beaver Creek near Idylwilde, CO	06748510	0.88	1960-73
Little Beaver Creek near Rustic, CO	06748530	12.3	1960-73
South Fork Cache La Poudre River near Rustic, CO	06748600	92.4	1956-79
Cache La Poudre River below Elkhorn, CO	06749000	409	1946-59
North Fork Cache La Poudre River near Livermore, CO	06751500	567	1947-65
Cache La Poudre River near Greeley, CO	06752500	1,877	1903-04, 1914-19, 1924-98
Lonetree Creek at Carr, CO	06753400	167	1993-95
Lonetree Creek near Nunn, CO	06753500	199	1951-57
Crow Creek near Barnsville, CO	06756500	1,324	1951-57
South Platte River at Masters, CO	06756995	12,175	1976-88
South Platte River at Sublette, CO	06757000	12,170	1926-42, 1943-55
Kiowa Creek at K-79 Reservoir near Eastonville, CO	06757600	3.20	1955-65
Kiowa Creek at Elbert, CO	06758000	28.6	1955-65
West Kiowa Creek at Elbert, CO	06758100	35.9	1962-65
Kiowa Creek at Kiowa, CO	06758200	111	1955-65
Kiowa Creek at Bennett, CO	06758300	236	1960-65

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE ONLY STATIONS (Continued)

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Station name	Station number	Drainage area (sq mi)	Period of record (water years)
Bijou Creek near Wiggins, CO	06759000	1,314	1950-56
Bijou Creek near Fort Morgan, CO	06759100	1,500	1976-87
South Platte River at Cooper Bridge near Balzac, CO	06759910	16,852	1987-98
South Platte River at Balzac, CO	06760000	16,852	1916-80
South Platte River near Crook, CO	06760500	19,238	1953-58
North Fork Republican River near Wray, CO	06822000	1,019	1937-46, 1951-57, 1962-64
South Fork Republican River near Idalia, CO	06825000	1,300	1950-71, 1972-81
Landsman Creek near Hale, CO	06825500	268	1950-76, 1977-81
Bonny Reservoir near Hale, CO	06826000	1,820	1950-95
South Fork Republican River near Hale, CO	06826500	1,825	1946-48, 1951-86
Leadville Mine Drainage Tunnel at Leadville, CO	07079200	--	1990-93
East Fork Arkansas River near Leadville, CO	07079500	50.0	1890-1903, 1910-24
Saint Kevin Gulch above Temple Gulch, near Leadville, CO	07080980	1.84	1993-96
Tennessee Creek near Leadville, CO	07081000	48.0	1890-1903, 1910-24
California Gulch at Malta, CO	07081800	8.13	1991-92
Lake Fork above Sugar Loaf Reservoir, CO	07082000	23.9	1946-67
Halfmoon Creek near Leadville, CO	07083500	25.2	1911-14
Arkansas River near Malta, CO	07083700	228	1964-67, 1976-84
Arkansas River below Empire Gulch, near Malta, CO	07083710	237	1990-93
Lake Creek above Twin Lakes Reservoir, CO	07084500	75	1946-98
Arkansas River at Buena Vista, CO	07087200	611	1964-80, 1986-93
Cottonwood Creek below Hot Springs near Buena Vista, CO	07089000	65.0	1910-23, 1949-86
Chalk Creek Upper Station near Saint Elmo, CO	07090000	48.0	1913-19
Chalk Creek near Saint Elmo, CO	07090500	83.0	1910-16
Chalk Creek near Nathrop, CO	07091000	97.0	1910, 1949-56, ^a
Arkansas River at Salida, CO	07091500	1,218	1895-97, 1901-03, 1909-80
South Arkansas River at Poncha, CO	07092000	140	1910-18
Poncha Creek at Poncha, CO	07093000	56.0	1910-18
South Arkansas River near Salida, CO	07093500	208	1922-23, 1929-40
South Colony Creek near Westcliffe, CO	07094600	6.03	1974-78
Middle Taylor Creek near Westcliffe, CO	07094900	3.19	1974-78, 1984-85
Fourmile Creek near Canon City, CO	07096500	434	1910-11, 1949-53, 1971-97
Beaver Creek near Portland, CO	07099100	214	1971-81
Arkansas River near Portland, CO	07099200	4,280	1964-79
Little Turkey Creek near Fountain, CO	07099220	9.59	1978-88
Arkansas River near Pueblo, CO	07099500	4,686	1885-87, 1889, 1894-1975
Monument Creek at Palmer Lake, CO	07103747	25.9	1977-90
Monument Creek at Monument, CO	07103750	28.5	1976-77
West Monument Creek near Pikeview, CO	07103900	15.4	1957-70
Kettle Creek near Black Forest, CO	07103950	9.01	1976-86
Templeton Gap Floodway at Colorado Springs, CO	07104500	8.73	1951-81
B Ditch Drain near Security, CO	07105780	--	1981-88
Clover Ditch near Widefield, CO	07105820	--	1981-88
Little Fountain Creek above Keaton Reservoir, CO	07105920	11.0	1978-88, 1995-98
Womack Ditch near Fort Carson, CO	07105924	--	1978-91

WATER RESOURCES DATA - COLORADO, 2002
DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE ONLY STATIONS (Continued)

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Station name	Station number	Drainage area (sq mi)	Period of record (water years)
Little Fountain Creek near Fort Carson, CO	07105928	11.8	1978-89, 1995-98
Little Fountain Creek near Fountain, CO	07105940	26.9	1978-88
Rock Creek near Fort Carson, CO	07105950	7.79	1978-98
Rock Creek near Fountain, CO	07105960	16.9	1978-88
Saint Charles River at San Isabel, CO	07107000	16.0	1936-41
Saint Charles River at Burnt Mill, CO	07107500	166	1923-34
Greenhorn Creek near Rye, CO	07107900	9.56	1974-80,1999-2001
Greenhorn Creek near Colorado City, CO	07108050	29.6	1974-79
Graneros Creek near Rye, CO	07108100	4.32	1999-2001
Saint Charles River near Pueblo, CO	07108500	467	1941-53,
Saint Charles River near Vineland, CO	07108800	473	1968-74
Saint Charles River at Mouth near Pueblo, CO	07109000	475	1922-25
Sixmile Creek near Avondale, CO	07110000	45.0	1922-24, 1941-46
Chico Creek near Pueblo Chemical Depot, CO	07110400		1997-99
Chico Creek near North Avondale, CO	07110500	864	1941-46
Huerfano River at Malachite, CO	07111500	107	1923-25
Huerfano River near Badito, CO	07112000	499	1941-46, 1978-81
Huerfano River at Badito, CO	07112500	532	1912, 1923-25, 1938-41, 1946-54
Huerfano River at Huerfano, CO	07113000	717	1923-28
Huerfano River near Mustang, CO	07113500	803	1942-47
Cucharas River at Boyd Ranch near La Veta, CO	07114000	56.0	1934-82
Cucharas River near La Veta, CO	07114500	75.0	1923-34
Huerfano River below Huerfano Valley Dam near Undercliffe, CO	07116000	1,673	1939-67
Arkansas River at Nepesta, CO	07117500	9,460	1898-1902, 1904-06, 1936
Chicosa Creek near Fowler, CO	07117600	109	1968-74
Apishapa River near Aguilar, CO	07118000	126	1939-50
Apishapa River at Aguilar, CO	07118500	149	1938-39, 1978-81
Apishapa River near White Rock, CO	07119000	737	1942-47
Big Arroyo near Thatcher, CO	07120620	15.5	1983-90 ^a
Timpas Creek near Rocky Ford, CO	07121000	451	1922-27, 1940-50
Fort Lyon Canal near Casa, CO	07122060	--	1988-90
Fort Lyon Canal near Cornelia, CO	07122105	--	1988-90
Fort Lyon Canal near Hasty, CO	07122200	--	1968-75 1988-90
Fort Lyon Canal near Big Bend, CO	07122350	--	1988-90
Crooked Arroyo near Swink, CO	07122400	108	1968-93
Crooked Arroyo near La Junta, CO	07122500	--	1922-25
Horse Creek near Sugar City, CO	07123500	1,080	1940-47
Horse Creek near Las Animas, CO	07123675	1,403	1979-93
Middle Fork Purgatoire River at Stonewall, CO	07124050	57.1	1978-81
Molino Canyon near Weston, CO	07124100	4.23	1978-81
Sarcillo Canyon near Segundo, CO	07124120	35.3	1978-81
Mulligan Canyon near Boncarbo, CO	07124210	4.53	1978-81
Reilly Canyon at Cokedale, CO	07124220	35.1	1978-81
Long Canyon Creek near Madrid, CO	07124300	100	1972-89
Carpitos Canyon near Jansen, CO	07124350	4.57	1978-81
Purgatoire River at Trinidad, CO	07124500	795	1895-99, 1905-12, 1915-60, 1961-82
Purgatoire River near Hoehne, CO	07125000	857	1954-68
Frijole Creek near Alfalfa, CO	07125100	80.0	1957-68
San Francisco Creek near Alfalfa, CO	07125500	160	1954-68

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE ONLY STATIONS (Continued)

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Station name	Station number	Drainage area (sq mi)	Period of record (water years)
Purgatoire River near Alfalfa, CO	07126000	1,320	1905-07, 1924-28, 1951-68
Van Bremer Arroyo near Thatcher, CO	07126130	80.6	1983-85
Burke Arroyo Tributary near Thatcher, CO	07126320	4.66	1983-87
Chacuaco Creek at Mouth, near Timpas, CO	07126470	424	1983-92 ^a
Purgatoire River at Highland Dam near Las Animas, CO	07128000	3,376	1898, 1931-55
Rule Creek near Caddoa, CO	07129500	435	1941-46
Caddoa Creek at Caddoa, CO	07131000	131	1941-46
Willow Creek near Lamar, CO	07133050	42.0	1974-77
Big Sandy Creek above Amity Canal near Korman, CO	07134000	3,396	1941-46
Two Butte Creek near Holly	07135000	817	1942-46, 1995-99 ^a
Arkansas River at Holly, CO	07135500	25,073	1894, 1901-02, 1907-53
Wild Horse Creek at Holly, CO	07136000	270	1922-35, 1938-50
Holly Drain near Holly, CO	07136500	--	1924-50
Rio Grande at Thirtymile Bridge near Creede, CO	08213500	163	1909-23 1925-98
North Clear Creek below Continental Reservoir, CO	08214500	51.7	1929-98
Willow Creek at Creede, CO	08216500	51.7	1951-82
Rio Grande at Wason below Creede, CO	08217000	705	1907-54
Rio Grande at Wagonwheel Gap, CO	08217500	780	1951-2000
Goose Creek near Wagonwheel Gap, CO	08218000	53.6	1924-26, 1939-52
Goose Creek at Wagonwheel Gap, CO	08218500	90.0	1954-91
Pinos Creek near Del Norte, CO	08220500	53.0	1919-24, 1936-82
San Francisco Creek at upper station near Del Norte, CO	08220900	11.8	1967-69
Rio Grande near Monte Vista, CO	08221500	1,590	1926-80
Rock Creek near Monte Vista, CO	08223500	32.9	1935-55, 1966-70
San Luis Creek near Poncha Pass, CO	08224110	6.57	1979-85
San Luis Creek above Villa Grove, CO	08224113	11.2	1979-85
Raspberry Creek near Villa Grove, CO	08224200	1.78	1967-70, 1936-82
Noland Gulch Tributary Reservoir Inflow, near Villa Grove, CO	08226600	0.08	1979-89
Cotton Creek near Mineral Hot Springs, CO	08226700	13.6	1967-70
Anaconda Reservoir near Villa Grove, CO	08227300	0.17	1979-85
Tracy Pit Reservoir Inflow near Saguache, CO	08227400	0.05	1979-89
North Crestone Creek near Crestone, CO	08227500	10.7	1936-82
Cottonwood Creek near Crestone, CO	08229500	6.77	1936, 1967-70
Carnero Creek near La Garita, CO	08230500	117	1919-82
Mosca Creek near Mosca, CO	08234200	3.67	1967-70
Alamosa River above Wightman Fork near Jasper, CO	08235250	37.8	1995-99
Wightman Fork below Cropsey Creek at Summitville, CO	08235270	4.44	1995-99
Wightman Fork at mouth near Jasper, CO	08235290	16.1	1995-99
Alamosa River above Jasper, CO	08235350	58.1	1995-99
Alamosa River below Castleman Gulch near Jasper, CO	08235700	76.3	1995-99
Alamosa Creek above Terrace Reservoir, CO	08236000	107	1911-12, 1914-27, 1934-82
Alamosa Creek below Terrace Reservoir, CO	08236500	116	1909-55
La Jara Creek at Gallegos Ranch near Capulin, CO	08238000	98.0	1916-17, 1919-23, 1936-82
Yellow Warbler Reservoir Inflow near Antonito, CO	08238350	0.18	1979-89
Turkey Reservoir Inflow near Conejos, CO	08238380	0.24	1979-89
Bobolink Reservoir near Conejos, CO	08238400	0.23	1979-89

WATER RESOURCES DATA - COLORADO, 2002
DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE ONLY STATIONS (Continued)

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Station name	Station number	Drainage area (sq mi)	Period of record (water years)
Rio Grande above Mouth of Trinchera Creek near Lasauses, CO	08240000	5,740	1936-98
Trinchera Creek above Turners Ranch near Fort Garland, CO	08240500	45.0	1923-82
Trinchera Creek above Mountain Home Reservoir near Fort Garland, CO	08241000	61.0	1923-55
Sangre De Cristo Creek near Fort Garland, CO	08241500	190	1916, 1923-30, 1931-82
Trinchera Creek below Smith Reservoir near Blanca, CO	08243500	396	1928-82
Conejos River at Platoro, CO	08245500	44.4	1936-53
Conejos River at Counsellors Cabin near Mogote, CO	08246000	211	1943-47
San Antonio River at mouth near Manassa, CO	08248500	348	1923-82
Culebra Creek near Chama, CO	08249400	72.4	1967-70
Culebra Creek below San Luis, CO	08250500	255	1938-55
Rio Grande at CO-NM State Line	08252000	--	1953-82

a-Converted to a crest-stage partial-record station.

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

The following stations were discontinued as continuous-record surface-water-quality stations. Daily records of temperature, specific conductance, pH, dissolved oxygen or sediment were collected and published for the period of record shown for each station. [--, data unavailable]

Station name	Station number	Drainage area (sq mi)	Type of record	Period of record (water years)
Canadian River near Lindland, CO	06619400	44.0	Temp., S.C., Sed.	1978-83
Canadian River near Brownlee, CO	06619450	158	Temp., S.C., Sed.	1978-83
Duck Creek near Grant, CO	06704500	7.78	Temp., S.C., Sed.	1995-97
Geneva Creek at Grant, CO	06705500	74.6	Temp., S.C., Sed.	1995-97
South Platte River at Littleton, CO	06710000	3,069	Temp. S.C.	1970-86 1984-86
South Platte River at 64th Ave. at Commerce City, CO	06714215	3,884	Temp., pH, D.O.	1987
South Clear Creek above Lower Cabin Creek Reservoir near Georgetown, CO	06714400	--	Temp., S.C., Sed.	1995-97 1995,1997
South Clear Creek above Leavenworth Creek near Georgetown, CO	06714600	16.0	Temp., S.C. Sed.	1995-97 1995
Leavenworth Creek at mouth, near Georgetown, CO	06714800	12.0	Temp., S.C. Sed.	1995-97 1995
Clear Creek at Golden, CO	06719505	400	pH, D.O., Sed. Temp., S.C.	1981 1981-95
Ralston Creek near Plainview, CO	06719725	36.9	Temp., S.C., pH, D.O.	1983-84
Schwartzwalder Mine Effluent near Plainview, CO	06719730	--	Temp., S.C., pH, D.O.	1983-84
Ralston Creek below Schwartzwalder Mine, CO	06719735	38.9	Temp., S.C., pH, D.O.	1983-84
Ralston Creek above Ralston Res. near Plainview, CO	06719740	42.7	Temp., S.C., pH, D.O.	1983-84
Cache La Poudre River at Fort Collins	06752260	1,127	Temp., S.C., pH	1987-99
Cache La Poudre River near Greeley, CO	06752500	1,877	Temp., S.C., pH, D.O.	1975
South Platte River near Kersey, CO	06754000	8,598	Temp.	1950-53
Kiowa Creek at Elbert, CO	06758000	28.6	Sed.	1957-68, 1960-62, 1964-65
West Kiowa Creek at Elbert, CO	06758100	35.9	Sed.	1962-65
Kiowa Creek at Kiowa, CO	06758200	111	Sed.	1956-65
South Platte River at Julesburg, CO (Chan. 2)	06763990	--	Temp. S.C.	1967-73 1971-73
North Fork Republican River near Wray, CO	06822000	1,019	Temp., Sed.	1962-63
East Fork Arkansas River at Highway 24 near Leadville, CO	07079300	49.9	Temp., S.C., pH	1990-96
Arkansas River near Leadville, CO	07081200	98.8	Temp., S.C., pH	1990-96
California Gulch at Malta, CO	07081800	8.13	Temp., S.C., pH	1991-92
Halfmoon Creek near Malta, CO	07083000	23.6	Temp.	1967-82
Arkansas River below Empire Gulch, near Malta, CO	07083710	237	Temp., S.C., pH	1990-93
Arkansas River at Buena Vista, CO	07087200	611	Temp., S.C.	1986-93
Arkansas River near Nathrop, CO	07091200	1,060	Temp., S.C., pH	1989-93
Arkansas River at Parkdale, CO	07094500	2,548	Temp., S.C.	1986-93
Monument Creek at Pikeview, CO	07104000	204	Sed.	1995-97
Fountain Creek at Security, CO	07105800	495	Temp., S.C., pH, D.O.	1991-98
Fountain Creek near Pinon, CO	07106300	849	Temp., S.C.	1976-79
Apishapa River at Aguilar, CO	07118500	149	Sed.	1979-81
Apishapa River near Fowler, CO	07119500	1,125	Temp., S.C.	1966-68
Big Arroyo near Thatcher, CO	07120620	15.5	Temp., S.C., Sed.	1983-90 ^a
Arkansas River near La Junta, CO	07122000	--	Temp., S.C.	1966-68
Horse Creek near Las Animas, CO	07123675	1,403	Temp., S.C.	1987-93
Middle Fork Purgatoire River at Stonewall, CO	07124050	52.1	Temp., S.C. Sed.	1978-81 1979-81
Molino Canyon near Weston, CO	07124100	4.23	Sed.	1979-81
Sarcillo Canyon near Segundo, CO	07124120	35.3	Sed.	1980-81
Purgatoire River at Madrid, CO	07124200	550	Temp., S.C. Sed.	1979-81 1978-81
Mulligan Canyon near Boncarbo, CO	07124210	4.53	Sed.	1979-81
Reilly Canyon at Cokedale, CO	07124220	35.1	Sed.	1979-81
Carpitos Canyon near Jansen, CO	07124350	100	Sed.	1979-81
Purgatoire River below Trinidad Lake, CO	07124410	672	Sed.	1977-82
Luning Arroyo Tributary near Model, CO	07126110	--	Temp., S.C.	1984
Van Bremer Arroyo near Thatcher, CO	07126130	80.6	Temp., S.C.	1985
Van Bremer Arroyo near Tyrone, CO	07126140	132	Temp., S.C.	1985-98
Van Bremer Arroyo near Model, CO	07126200	175	Temp., S.C.	1983-98

WATER RESOURCES DATA - COLORADO, 2002
DISCONTINUED SURFACE-WATER-QUALITY STATIONS

The following stations were discontinued as continuous-record surface-water-quality stations. Daily records of temperature, specific conductance, pH, dissolved oxygen or sediment were collected and published for the period of record shown for each station. [--, data unavailable]

Station name	Station number	Drainage area (sq mi)	Type of record	Period of record (water years)
Purgatoire River near Thatcher, CO	07126300	1,791	Sed.	1983-92
			Temp., S.C.	1983-98
Burke Arroyo Tributary near Thatcher, CO	07126320	4.66	Temp., S.C.	1983-86
			Sed.	1984-86
Taylor Arroyo below Rock Crossing near Thatcher, CO	07126325	48.4	Temp., S.C.	1983-98
Lockwood Canyon Creek near Thatcher, CO	07126390	41.4	Temp., S.C., Sed.	1989-92
Red Rock Canyon Creek at Mouth, near Thatcher, CO	07126415	48.8	Temp., S.C.	1983-90 ^a
Chacuaco Creek at Mouth near Timpas, CO	07126470	424	Temp., S.C., Sed.	1983-92
Bent Canyon Creek at Mouth near Timpas, CO	07126480	56.2	Temp., S.C.	1983-90 ^a
Purgatoire River at Rock Crossing near Timpas, CO	07126485	2,635	Temp., S.C., Sed.	1983-92
Purgatoire River at Highland Dam near Las Animas, CO	07128000	3,376	S.C.	1967-68
Purgatoire River near Las Animas, CO	07128500	3,318	Temp., S.C.	1986-96
Willow Creek at Creede, CO	08216500	35.3	Temp., S.C.	1976-77
Rio Grande at Wagonwheel Gap, CO	08217500	780	Temp., S.C.	1976-77
San Luis Creek near Poncha Pass, CO	08224110	6.57	Sed.	1981-83
San Luis Creek above Villa Grove, CO	08224113	11.2	Sed.	1981-83
Alamosa River above Wightman Fork near Jasper, CO	08235250	37.8	Temp., S.C., pH	1995-97,99
Wightman Fork at mouth near Jasper, CO	08235290	16.1	Temp., S.C., pH	1995-97,99
Alamosa River above Terrace Reservoir, CO	08236000	106	Temp., S.C., pH	1994-97
Alamosa River below Terrace Reservoir, CO	08236500	116	Temp., S.C., pH	1995-97,99
Rio Grande above Culebra Creek near Lobatos, CO	08249200	--	Temp., S.C.	1964-66

Type of record: Temp. (temperature), S.C. (specific conductance), pH (pH), D.O. (dissolved oxygen), Sed. (sediment).

a-Converted to a crest-stage partial-record station.

TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS OF THE U.S. GEOLOGICAL SURVEY

The USGS publishes a series of manuals titled the "Techniques of Water-Resources Investigations" that describe procedures for planning and conducting specialized work in water-resources investigations. The material in these manuals is grouped under major subject headings called books and is further divided into sections and chapters. For example, section A of book 3 (Applications of Hydraulics) pertains to surface water. Each chapter then is limited to a narrow field of the section subject matter. This publication format permits flexibility when revision or printing is required.

Manuals in the Techniques of Water-Resources Investigations series, which are listed below, are available online at <http://water.usgs.gov/pubs/twri/>. Printed copies are available for sale from the USGS, Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (an authorized agent of the Superintendent of Documents, Government Printing Office). Please telephone "1-888-ASK-USGS" for current prices, and refer to the title, book number, section number, chapter number, and mention the "U.S. Geological Survey Techniques of Water-Resources Investigations." Other products can be viewed online at <http://www.usgs.gov/sales.html>, or ordered by telephone or by FAX to (303) 236-4693. Order forms for FAX requests are available online at <http://mac.usgs.gov/isb/pubs/forms/>. Prepayment by major credit card or by a check or money order payable to the "U.S. Geological Survey" is required.

Book 1. Collection of Water Data by Direct Measurement**Section D. Water Quality**

- 1-D1. *Water temperature—Influential factors, field measurement, and data presentation*, by H.H. Stevens, Jr., J.F. Ficke, and G.F. Smoot: USGS–TWRI book 1, chap. D1. 1975. 65 p.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W.W. Wood: USGS–TWRI book 1, chap. D2. 1976. 24 p.

Book 2. Collection of Environmental Data**Section D. Surface Geophysical Methods**

- 2-D1. *Application of surface geophysics to ground-water investigations*, by A.A.R. Zohdy, G.P. Eaton, and D.R. Mabey: USGS–TWRI book 2, chap. D1. 1974. 116 p.
- 2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F.P. Haeni: USGS–TWRI book 2, chap. D2. 1988. 86 p.

Section E. Subsurface Geophysical Methods

- 2-E1. *Application of borehole geophysics to water-resources investigations*, by W.S. Keys and L.M. MacCary: USGS–TWRI book 2, chap. E1. 1971. 126 p.
- 2-E2. *Borehole geophysics applied to ground-water investigations*, by W.S. Keys: USGS–TWRI book 2, chap. E2. 1990. 150 p.

Section F. Drilling and Sampling Methods

- 2-F1. *Application of drilling, coring, and sampling techniques to test holes and wells*, by Eugene Shuter and W.E. Teasdale: USGS–TWRI book 2, chap. F1. 1989. 97 p.

Book 3. Applications of Hydraulics**Section A. Surface-Water Techniques**

- 3-A1. *General field and office procedures for indirect discharge measurements*, by M.A. Benson and Tate Dalrymple: USGS–TWRI book 3, chap. A1. 1967. 30 p.
- 3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M.A. Benson: USGS–TWRI book 3, chap. A2. 1967. 12 p.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G.L. Bodhaine: USGS–TWRI book 3, chap. A3. 1968. 60 p.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H.F. Matthai: USGS–TWRI book 3, chap. A4. 1967. 44 p.

- 3–A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS–TWRI book 3, chap. A5. 1967. 29 p.
- 3–A6. *General procedure for gaging streams*, by R.W. Carter and Jacob Davidian: USGS–TWRI book 3, chap. A6. 1968. 13 p.
- 3–A7. *Stage measurement at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A7. 1968. 28 p.
- 3–A8. *Discharge measurements at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A8. 1969. 65 p.
- 3–A9. *Measurement of time of travel in streams by dye tracing*, by F.A. Kilpatrick and J.F. Wilson, Jr.: USGS–TWRI book 3, chap. A9. 1989. 27 p.
- 3–A10. *Discharge ratings at gaging stations*, by E.J. Kennedy: USGS–TWRI book 3, chap. A10. 1984. 59 p.
- 3–A11. *Measurement of discharge by the moving-boat method*, by G.F. Smoot and C.E. Novak: USGS–TWRI book 3, chap. A11. 1969. 22 p.
- 3–A12. *Fluorometric procedures for dye tracing*, Revised, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS–TWRI book 3, chap. A12. 1986. 34 p.
- 3–A13. *Computation of continuous records of streamflow*, by E.J. Kennedy: USGS–TWRI book 3, chap. A13. 1983. 53 p.
- 3–A14. *Use of flumes in measuring discharge*, by F.A. Kilpatrick and V.R. Schneider: USGS–TWRI book 3, chap. A14. 1983. 46 p.
- 3–A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS–TWRI book 3, chap. A15. 1984. 48 p.
- 3–A16. *Measurement of discharge using tracers*, by F.A. Kilpatrick and E.D. Cobb: USGS–TWRI book 3, chap. A16. 1985. 52 p.
- 3–A17. *Acoustic velocity meter systems*, by Antonius Laenen: USGS–TWRI book 3, chap. A17. 1985. 38 p.
- 3–A18. *Determination of stream reaeration coefficients by use of tracers*, by F.A. Kilpatrick, R.E. Rathbun, Nobuhiro Yotsukura, G.W. Parker, and L.L. DeLong: USGS–TWRI book 3, chap. A18. 1989. 52 p.
- 3–A19. *Levels at streamflow gaging stations*, by E.J. Kennedy: USGS–TWRI book 3, chap. A19. 1990. 31 p.
- 3–A20. *Simulation of soluble waste transport and buildup in surface waters using tracers*, by F.A. Kilpatrick: USGS–TWRI book 3, chap. A20. 1993. 38 p.
- 3–A21. *Stream-gaging cableways*, by C. Russell Wagner: USGS–TWRI book 3, chap. A21. 1995. 56 p.

Section B. Ground-Water Techniques

- 3–B1. *Aquifer-test design, observation, and data analysis*, by R.W. Stallman: USGS–TWRI book 3, chap. B1. 1971. 26 p.
- 3–B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G.D. Bennett: USGS–TWRI book 3, chap. B2. 1976. 172 p.
- 3–B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J.E. Reed: USGS–TWRI book 3, chap. B3. 1980. 106 p.
- 3–B4. *Regression modeling of ground-water flow*, by R.L. Cooley and R.L. Naff: USGS–TWRI book 3, chap. B4. 1990. 232 p.
- 3–B4. *Supplement 1. Regression modeling of ground-water flow—Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems*, by R.L. Cooley: USGS–TWRI book 3, chap. B4. 1993. 8 p.
- 3–B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems—An introduction*, by O.L. Franke, T.E. Reilly, and G.D. Bennett: USGS–TWRI book 3, chap. B5. 1987. 15 p.
- 3–B6. *The principle of superposition and its application in ground-water hydraulics*, by T.E. Reilly, O.L. Franke, and G.D. Bennett: USGS–TWRI book 3, chap. B6. 1987. 28 p.

- 3-B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow*, by E.J. Wexler: USGS-TWRI book 3, chap. B7. 1992. 190 p.
- 3-B8. *System and boundary conceptualization in ground-water flow simulation*, by T.E. Reilly: USGS-TWRI book 3, chap. B8. 2001. 29 p.

Section C. Sedimentation and Erosion Techniques

- 3-C1. *Fluvial sediment concepts*, by H.P. Guy: USGS-TWRI book 3, chap. C1. 1970. 55 p.
- 3-C2. *Field methods for measurement of fluvial sediment*, by T.K. Edwards and G.D. Glysson: USGS-TWRI book 3, chap. C2. 1999. 89 p.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS-TWRI book 3, chap. C3. 1972. 66 p.

Book 4. Hydrologic Analysis and Interpretation

Section A. Statistical Analysis

- 4-A1. *Some statistical tools in hydrology*, by H.C. Riggs: USGS-TWRI book 4, chap. A1. 1968. 39 p.
- 4-A2. *Frequency curves*, by H.C. Riggs: USGS-TWRI book 4, chap. A2. 1968. 15 p.
- 4-A3. *Statistical methods in water resources*, by D.R. Helsel and R.M. Hirsch: USGS-TWRI book 4, chap. A3. 1991. Available only online at <http://water.usgs.gov/pubs/twri/twri4a3/>. (Accessed August 30, 2002.)

Section B. Surface Water

- 4-B1. *Low-flow investigations*, by H.C. Riggs: USGS-TWRI book 4, chap. B1. 1972. 18 p.
- 4-B2. *Storage analyses for water supply*, by H.C. Riggs and C.H. Hardison: USGS-TWRI book 4, chap. B2. 1973. 20 p.
- 4-B3. *Regional analyses of streamflow characteristics*, by H.C. Riggs: USGS-TWRI book 4, chap. B3. 1973. 15 p.

Section D. Interrelated Phases of the Hydrologic Cycle

- 4-D1. *Computation of rate and volume of stream depletion by wells*, by C.T. Jenkins: USGS-TWRI book 4, chap. D1. 1970. 17 p.

Book 5. Laboratory Analysis

Section A. Water Analysis

- 5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M.J. Fishman and L.C. Friedman, editors: USGS-TWRI book 5, chap. A1. 1989. 545 p.
- 5-A2. *Determination of minor elements in water by emission spectroscopy*, by P.R. Barnett and E.C. Mallory, Jr.: USGS-TWRI book 5, chap. A2. 1971. 31 p.
- 5-A3. *Methods for the determination of organic substances in water and fluvial sediments*, edited by R.L. Wershaw, M.J. Fishman, R.R. Grabbe, and L.E. Lowe: USGS-TWRI book 5, chap. A3. 1987. 80 p.
- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, by L.J. Britton and P.E. Greeson, editors: USGS-TWRI book 5, chap. A4. 1989. 363 p.
- 5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: USGS-TWRI book 5, chap. A5. 1977. 95 p.
- 5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments*, by L.C. Friedman and D.E. Erdmann: USGS-TWRI book 5, chap. A6. 1982. 181 p.

Section C. Sediment Analysis

- 5-C1. *Laboratory theory and methods for sediment analysis*, by H.P. Guy: USGS-TWRI book 5, chap. C1. 1969. 58 p.

Book 6. Modeling Techniques**Section A. Ground Water**

- 6–A1. *A modular three-dimensional finite-difference ground-water flow model*, by M.G. McDonald and A.W. Harbaugh: USGS–TWRI book 6, chap. A1. 1988. 586 p.
- 6–A2. *Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model*, by S.A. Leake and D.E. Prudic: USGS–TWRI book 6, chap. A2. 1991. 68 p.
- 6–A3. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual*, by L.J. Torak: USGS–TWRI book 6, chap. A3. 1993. 136 p.
- 6–A4. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions*, by R.L. Cooley: USGS–TWRI book 6, chap. A4. 1992. 108 p.
- 6–A5. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 3: Design philosophy and programming details*, by L.J. Torak: USGS–TWRI book 6, chap. A5. 1993. 243 p.
- 6–A6. *A coupled surface-water and ground-water flow model (MODBRANCH) for simulation of stream-aquifer interaction*, by Eric D. Swain and Eliezer J. Wexler: USGS–TWRI book 6, chap. A6. 1996. 125 p.
- 6–A7. *User's guide to SEAWAT: A computer program for simulation of three-dimensional variable-density ground-water flow*, by Weixing Guo and Christian D. Langevin: USGS–TWRI book 6, chap. A7. 2002. 77 p.

Book 7. Automated Data Processing and Computations**Section C. Computer Programs**

- 7–C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P.C. Trescott, G.F. Pinder, and S.P. Larson: USGS–TWRI book 7, chap. C1. 1976. 116 p.
- 7–C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L.F. Konikow and J.D. Bredehoeft: USGS–TWRI book 7, chap. C2. 1978. 90 p.
- 7–C3. *A model for simulation of flow in singular and interconnected channels*, by R.W. Schaffranek, R.A. Baltzer, and D.E. Goldberg: USGS–TWRI book 7, chap. C3. 1981. 110 p.

Book 8. Instrumentation**Section A. Instruments for Measurement of Water Level**

- 8–A1. *Methods of measuring water levels in deep wells*, by M.S. Garber and F.C. Koopman: USGS–TWRI book 8, chap. A1. 1968. 23 p.
- 8–A2. *Installation and service manual for U.S. Geological Survey manometers*, by J.D. Craig: USGS–TWRI book 8, chap. A2. 1983. 57 p.

Section B. Instruments for Measurement of Discharge

- 8–B2. *Calibration and maintenance of vertical-axis type current meters*, by G.F. Smoot and C.E. Novak: USGS–TWRI book 8, chap. B2. 1968. 15 p.

Book 9. Handbooks for Water-Resources Investigations**Section A. National Field Manual for the Collection of Water-Quality Data**

- 9–A1. *National field manual for the collection of water-quality data: Preparations for water sampling*, by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A1. 1998. 47 p.
- 9–A2. *National field manual for the collection of water-quality data: Selection of equipment for water sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A2. 1998. 94 p.
- 9–A3. *National field manual for the collection of water-quality data: Cleaning of equipment for water sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A3. 1998. 75 p.

- 9–A4. *National field manual for the collection of water-quality data: Collection of water samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A4. 1999. 156 p.
- 9–A5. *National field manual for the collection of water-quality data: Processing of water samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A5. 1999, 149 p.
- 9–A6. *National field manual for the collection of water-quality data: Field measurements*, edited by F.D. Wilde and D.B. Radtke: USGS–TWRI book 9, chap. A6. 1998. Variously paginated.
- 9–A7. *National field manual for the collection of water-quality data: Biological indicators*, edited by D.N. Myers and F.D. Wilde: USGS–TWRI book 9, chap. A7. 1997 and 1999. Variously paginated.
- 9–A8. *National field manual for the collection of water-quality data: Bottom-material samples*, by D.B. Radtke: USGS–TWRI book 9, chap. A8. 1998. 48 p.
- 9–A9. *National field manual for the collection of water-quality data: Safety in field activities*, by S.L. Lane and R.G. Fay: USGS–TWR

HYDROLOGIC-DATA STATION RECORDS

PLATTE RIVER BASIN

06614800 MICHIGAN RIVER NEAR CAMERON PASS, CO

LOCATION.--Lat 40°29'46", long 105°51'52", in S½ sec.12, T.6 N., R.76 W., (unsurveyed), Jackson County, Hydrologic Unit 10180001, on right bank 500 ft upstream from Michigan ditch, 2.2 mi southeast of Cameron Pass, 8 mi east of Gould, and 27 mi southeast of Walden.

DRAINAGE AREA.--1.53 mi².

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 10,390 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.98	0.66	e0.31	e0.23	e0.23	e0.20	0.20	0.62	20	2.6	0.83	0.57
2	0.94	0.63	e0.31	e0.23	e0.23	e0.20	0.20	0.57	20	2.4	0.84	0.55
3	0.90	0.63	e0.31	e0.23	e0.23	e0.20	0.20	0.53	16	2.3	0.94	0.54
4	0.85	0.63	e0.31	e0.23	e0.23	e0.20	0.20	0.52	14	2.3	0.88	0.52
5	0.84	0.60	e0.31	e0.23	e0.23	e0.20	0.20	0.54	14	2.3	0.87	0.52
6	0.81	0.56	e0.31	e0.23	e0.23	e0.20	0.20	0.75	16	2.1	0.91	0.50
7	0.81	0.55	e0.31	e0.23	e0.23	e0.20	0.23	1.2	16	2.0	1.3	0.48
8	0.81	0.56	e0.31	e0.23	e0.23	e0.20	0.25	1.5	18	1.9	1.6	0.48
9	0.82	e0.52	e0.31	e0.23	e0.23	e0.20	0.27	1.2	18	1.8	1.3	0.62
10	0.84	e0.47	e0.31	e0.23	e0.23	e0.20	0.28	1.2	15	1.6	1.1	0.62
11	0.83	e0.47	e0.31	e0.23	e0.21	e0.20	0.27	1.4	12	1.6	0.97	1.0
12	0.79	e0.46	e0.31	e0.23	e0.21	e0.20	0.27	1.4	11	1.5	0.89	1.6
13	0.79	e0.46	e0.31	e0.23	e0.21	e0.20	0.28	1.5	9.7	1.4	0.85	1.5
14	0.76	e0.42	e0.29	e0.23	e0.21	e0.20	0.31	2.0	8.6	1.4	0.78	1.2
15	0.79	e0.44	e0.29	e0.23	e0.21	e0.20	0.34	2.1	7.6	1.2	0.74	1.1
16	0.81	e0.44	e0.29	e0.23	e0.21	e0.20	0.31	1.8	7.1	1.2	0.68	0.99
17	0.79	e0.44	e0.29	e0.23	e0.21	e0.20	0.31	1.7	6.9	1.1	0.65	0.97
18	0.78	e0.39	e0.29	e0.23	e0.21	e0.20	0.31	2.1	6.6	1.1	0.62	1.1
19	0.75	e0.39	e0.29	e0.23	e0.21	e0.20	0.31	3.1	6.2	1.1	0.61	1.0
20	0.76	e0.37	e0.28	e0.23	e0.21	e0.20	0.38	4.7	6.0	1.4	0.59	0.96
21	0.73	e0.37	e0.28	e0.23	e0.21	e0.20	0.37	5.5	5.8	1.9	0.64	0.85
22	0.72	e0.36	e0.28	e0.23	e0.21	e0.20	0.36	4.1	5.6	1.5	0.68	0.79
23	0.68	e0.34	e0.26	e0.23	e0.21	e0.20	0.36	3.7	5.2	1.4	0.64	0.76
24	0.69	e0.34	e0.26	e0.23	e0.21	e0.20	0.40	3.9	4.7	1.3	0.61	0.74
25	0.67	e0.33	e0.26	e0.23	e0.21	e0.18	0.44	4.4	4.2	1.4	0.59	0.71
26	0.63	e0.31	e0.26	e0.23	e0.21	e0.18	0.43	4.6	3.9	1.5	0.55	0.86
27	0.64	e0.31	e0.24	e0.23	e0.20	e0.18	0.50	5.2	3.5	1.3	0.55	0.79
28	0.67	e0.31	e0.23	e0.23	e0.20	0.17	0.48	6.9	3.3	1.1	0.55	0.74
29	0.71	e0.31	e0.23	e0.23	---	0.18	0.46	9.8	3.1	0.97	0.60	0.73
30	0.70	e0.31	e0.23	e0.23	---	0.18	0.52	19	2.8	0.93	0.64	0.74
31	0.65	---	e0.23	e0.23	---	0.19	---	21	---	0.88	0.61	---
TOTAL	23.94	13.38	8.81	7.13	6.06	6.06	9.64	118.53	290.8	48.48	24.61	24.53
MEAN	0.772	0.446	0.284	0.230	0.216	0.195	0.321	3.824	9.693	1.564	0.794	0.818
MAX	0.98	0.66	0.31	0.23	0.23	0.20	0.52	21	20	2.6	1.6	1.6
MIN	0.63	0.31	0.23	0.23	0.20	0.17	0.20	0.52	2.8	0.88	0.55	0.48
AC-FT	47	27	17	14	12	12	19	235	577	96	49	49

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2002, BY WATER YEAR (WY)

	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	0.925	0.562	0.427	0.356	0.315	0.323	0.409	3.987	16.24	8.693	2.702	1.429																	
MAX	2.25	1.11	0.88	0.57	0.55	0.86	0.80	9.50	27.1	24.8	6.83	4.82																	
(WY)	1998	1996	1996	1988	1986	1986	1994	1974	1990	1995	1983	1997																	
MIN	0.32	0.20	0.25	0.17	0.16	0.17	0.22	0.70	9.69	1.56	0.79	0.49																	
(WY)	1980	1979	1979	1991	1977	1974	1982	1995	2002	2002	2002	1988																	

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1974 - 2002

ANNUAL TOTAL	804.52	581.97	
ANNUAL MEAN	2.204	1.594	
HIGHEST ANNUAL MEAN			4.61 1983
LOWEST ANNUAL MEAN			1.59 2002
HIGHEST DAILY MEAN	22 Jun 2	21 May 31	69 Jul 14 1995
LOWEST DAILY MEAN	e0.23 Dec 28	e0.17 Mar 28	0.08 Nov 16 1989
ANNUAL SEVEN-DAY MINIMUM	e0.24 Dec 25	e0.18 Mar 25	0.14 Jan 9 1979
MAXIMUM PEAK FLOW		37 May 30	a,b115 Jul 12 1995
MAXIMUM PEAK STAGE		3.44 May 30	b,c3.69 Jul 12 1995
ANNUAL RUNOFF (AC-FT)	1600	1150	2200
10 PERCENT EXCEEDS	7.6	3.9	9.5
50 PERCENT EXCEEDS	0.68	0.55	0.61
90 PERCENT EXCEEDS	0.28	0.20	0.26

e Estimated.
a From rating curve extended above 82 ft³/s.
b Also occurred Jul 13, 1995.
c Maximum gage height, 3.70 ft, Jun 20, 1997.

06618300 ILLINOIS RIVER BELOW ISH BALDWIN DITCH NEAR WALDEN, CO

LOCATION.--Lat 40°34'32", long 106°14'28", in NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.15, T.7 N., R.79 W., Jackson County, Hydrologic Unit 10180001, on right bank 200 ft below Ish Baldwin Ditch diversion, 9.7 mi north-northwest of Rand, and 11 mi south-southeast of Walden.

DRAINAGE AREA.--181 mi².

PERIOD OF RECORD.--April to September 2002 (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,295 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream is affected by numerous upstream diversions and return flow. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data for Gaging Stations" section of this report.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge during period April to September, 57 ft³/s, Apr. 9, gage height, 5.18 ft; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	e51	e0.78	5.4	0.44	0.00	0.00
2	---	---	---	---	---	---	e51	e0.62	6.2	0.07	0.00	0.00
3	---	---	---	---	---	---	e51	e0.53	6.5	0.00	0.00	0.00
4	---	---	---	---	---	---	e47	e0.45	10	0.42	0.00	0.00
5	---	---	---	---	---	---	e43	e0.38	9.4	0.65	0.00	0.00
6	---	---	---	---	---	---	e39	e0.32	6.3	0.77	0.00	0.00
7	---	---	---	---	---	---	e34	e0.23	4.8	0.66	0.00	0.00
8	---	---	---	---	---	---	e29	0.23	4.2	0.28	0.00	0.00
9	---	---	---	---	---	---	27	1.4	3.2	0.07	0.00	0.00
10	---	---	---	---	---	---	20	1.1	2.9	0.01	0.00	0.00
11	---	---	---	---	---	---	11	0.77	3.7	0.00	0.00	0.00
12	---	---	---	---	---	---	5.7	1.8	4.3	0.00	0.00	0.00
13	---	---	---	---	---	---	9.8	3.6	4.7	0.00	0.00	0.00
14	---	---	---	---	---	---	6.3	4.1	4.8	0.00	0.00	0.00
15	---	---	---	---	---	---	4.9	2.4	5.4	0.00	0.00	0.00
16	---	---	---	---	---	---	5.2	2.6	6.9	0.00	0.00	0.00
17	---	---	---	---	---	---	4.7	4.6	6.2	0.00	0.00	0.00
18	---	---	---	---	---	---	4.3	5.3	6.0	0.00	0.00	0.00
19	---	---	---	---	---	---	4.4	4.5	5.0	0.00	0.00	0.00
20	---	---	---	---	---	---	5.4	5.4	5.6	0.00	0.00	0.00
21	---	---	---	---	---	---	5.9	5.8	13	0.00	0.00	0.00
22	---	---	---	---	---	---	5.5	6.0	13	0.00	0.00	0.00
23	---	---	---	---	---	---	5.3	6.3	13	0.00	0.00	0.00
24	---	---	---	---	---	---	2.2	7.7	11	0.00	0.00	0.00
25	---	---	---	---	---	---	1.3	9.1	8.0	0.00	0.00	0.00
26	---	---	---	---	---	---	0.99	6.4	6.6	0.00	0.00	0.00
27	---	---	---	---	---	---	1.1	4.7	5.7	0.00	0.00	0.00
28	---	---	---	---	---	---	1.0	3.6	2.3	0.00	0.00	0.00
29	---	---	---	---	---	---	1.0	2.5	1.6	0.00	0.00	0.00
30	---	---	---	---	---	---	e1.0	2.4	0.88	0.00	0.00	0.00
31	---	---	---	---	---	---	---	3.8	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	478.99	99.41	186.58	3.37	0.00	0.00
MEAN	---	---	---	---	---	---	15.97	3.207	6.219	0.109	0.000	0.000
MAX	---	---	---	---	---	---	51	9.1	13	0.77	0.00	0.00
MIN	---	---	---	---	---	---	0.99	0.23	0.88	0.00	0.00	0.00
AC-FT	---	---	---	---	---	---	950	197	370	6.7	0.00	0.00

e Estimated.

06618480 ILLINOIS RIVER BELOW POTTER CREEK NEAR WALDEN, CO

LOCATION.--Lat 40°42'31", long 106°16'47", in SW¹/₄NW¹/₄ sec.32, T.9 N., R.79 W., Jackson County, Hydrologic Unit 10180001, on left bank 500 ft downstream from Potter Creek, and 1.5 mi south of Walden.

DRAINAGE AREA.--257 mi², of which about 0.33 mi² is probably non-contributing..

PERIOD OF RECORD.--August 2001 to current year (seasonal recods only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,070 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream is affected by numerous diversions and return flow. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data for Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 56 ft³/s, April 3, 2002, gage height, 5.06 ft; no flow many days.

EXTREMES FOR 2001 WATER YEAR (seasonal only).--Maximum discharge during period August to September, 1.7 ft³/s, Sept. 24, gage height, 4.02 ft; no flow many days.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 56 ft³/s, Apr. 3, gage height, 5.06 ft; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	0.02
2	---	---	---	---	---	---	---	---	---	---	---	0.00
3	---	---	---	---	---	---	---	---	---	---	---	0.00
4	---	---	---	---	---	---	---	---	---	---	---	0.00
5	---	---	---	---	---	---	---	---	---	---	---	0.00
6	---	---	---	---	---	---	---	---	---	---	---	0.00
7	---	---	---	---	---	---	---	---	---	---	---	0.00
8	---	---	---	---	---	---	---	---	---	---	---	0.00
9	---	---	---	---	---	---	---	---	---	---	---	0.00
10	---	---	---	---	---	---	---	---	---	---	---	0.00
11	---	---	---	---	---	---	---	---	---	---	---	0.00
12	---	---	---	---	---	---	---	---	---	---	---	0.00
13	---	---	---	---	---	---	---	---	---	---	---	0.00
14	---	---	---	---	---	---	---	---	---	---	---	0.00
15	---	---	---	---	---	---	---	---	---	---	---	0.00
16	---	---	---	---	---	---	---	---	---	---	---	0.00
17	---	---	---	---	---	---	---	---	---	---	---	0.00
18	---	---	---	---	---	---	---	---	---	---	---	0.00
19	---	---	---	---	---	---	---	---	---	---	---	0.00
20	---	---	---	---	---	---	---	---	---	---	---	0.00
21	---	---	---	---	---	---	---	---	---	---	---	0.00
22	---	---	---	---	---	---	---	---	---	---	---	0.00
23	---	---	---	---	---	---	---	---	---	---	---	0.00
24	---	---	---	---	---	---	---	---	---	---	---	1.2
25	---	---	---	---	---	---	---	---	---	---	---	0.86
26	---	---	---	---	---	---	---	---	---	---	---	0.45
27	---	---	---	---	---	---	---	---	---	---	---	0.34
28	---	---	---	---	---	---	---	---	---	---	---	0.21
29	---	---	---	---	---	---	---	---	---	---	e0.00	0.13
30	---	---	---	---	---	---	---	---	---	---	0.00	0.08
31	---	---	---	---	---	---	---	---	---	---	0.00	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	3.29
MEAN	---	---	---	---	---	---	---	---	---	---	---	0.110
MAX	---	---	---	---	---	---	---	---	---	---	---	1.2
MIN	---	---	---	---	---	---	---	---	---	---	---	0.00
AC-FT	---	---	---	---	---	---	---	---	---	---	---	6.5

e Estimated.

PLATTE RIVER BASIN

06618480 ILLINOIS RIVER BELOW POTTER CREEK NEAR WALDEN, CO--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.06	---	---	---	---	---	e42	8.4	1.5	0.05	0.00	0.00
2	0.05	---	---	---	---	---	e42	7.5	0.96	0.03	0.00	0.00
3	0.03	---	---	---	---	---	e42	5.5	0.70	0.03	0.00	0.00
4	---	---	---	---	---	---	e46	5.1	0.59	0.03	0.00	0.00
5	---	---	---	---	---	---	e34	5.0	4.8	0.04	0.02	0.00
6	---	---	---	---	---	---	30	4.8	10	0.03	0.00	0.00
7	---	---	---	---	---	---	26	4.4	10	0.02	0.00	0.00
8	---	---	---	---	---	---	19	4.0	6.8	0.0	0.00	0.00
9	---	---	---	---	---	---	16	3.4	4.0	0.00	0.00	0.00
10	---	---	---	---	---	---	17	2.9	2.0	0.00	0.00	0.00
11	---	---	---	---	---	---	19	2.0	0.99	0.00	0.00	0.00
12	---	---	---	---	---	---	15	1.1	0.58	0.00	0.00	0.00
13	---	---	---	---	---	---	13	1.2	0.36	0.00	0.00	0.00
14	---	---	---	---	---	---	14	1.5	0.23	0.00	0.00	0.00
15	---	---	---	---	---	---	12	1.5	0.15	0.00	0.00	0.00
16	---	---	---	---	---	---	9.4	2.4	0.12	0.00	0.00	0.00
17	---	---	---	---	---	---	7.3	4.5	0.10	0.00	0.00	0.00
18	---	---	---	---	---	---	6.7	4.9	2.8	0.00	0.00	0.00
19	---	---	---	---	---	---	6.9	5.1	0.94	0.00	0.00	0.00
20	---	---	---	---	---	---	6.4	5.9	0.13	0.00	0.00	0.00
21	---	---	---	---	---	---	6.2	8.2	0.03	0.00	0.00	0.00
22	---	---	---	---	---	---	6.1	5.7	0.03	0.00	0.00	0.00
23	---	---	---	---	---	---	5.7	4.5	0.00	0.00	0.00	0.00
24	---	---	---	---	---	---	5.3	5.7	1.3	0.00	0.00	0.00
25	---	---	---	---	---	---	5.5	13	2.2	0.00	0.00	0.00
26	---	---	---	---	---	---	6.1	14	1.9	0.00	0.00	0.00
27	---	---	---	---	---	---	6.1	12	1.0	0.00	0.00	0.00
28	---	---	---	---	---	---	6.3	9.3	0.42	0.00	0.00	0.00
29	---	---	---	---	---	---	7.2	7.3	0.14	0.00	0.00	0.00
30	---	---	---	---	---	---	9.2	4.7	0.06	0.00	0.00	0.00
31	---	---	---	---	---	---	---	3.1	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	487.4	168.6	54.83	0.23	0.02	0.00
MEAN	---	---	---	---	---	---	16.25	5.439	1.828	0.007	0.001	0.000
MAX	---	---	---	---	---	---	46	14	10	0.05	0.02	0.00
MIN	---	---	---	---	---	---	5.3	1.1	0.00	0.00	0.00	0.00
AC-FT	---	---	---	---	---	---	967	334	109	0.5	0.04	0.00

e Estimated.

PLATTE RIVER BASIN

06693800 MOSQUITO CREEK NEAR ALMA, CO

LOCATION.--Lat 39°16'12", long 106°03'02", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.13, T.9 S., R.78 W., Park County, Hydrologic Unit 10190001, on left bank 0.1 mi upstream from confluence with Middle Fork South Platte River, and 1.2 mi south of Alma.

DRAINAGE AREA.--16.2 mi².

PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 10,220 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by minor diversions for irrigation, and return flow from irrigated areas. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data for Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	7.5	e5.1	e3.2	e3.0	e3.1	e4.0	11	27	9.0	5.0	4.0
2	9.2	7.9	e5.1	e3.2	e3.0	e3.1	e4.1	9.5	26	8.8	5.2	4.0
3	8.9	7.7	e4.9	e3.2	e3.0	e3.2	e4.1	8.5	24	8.7	5.3	4.0
4	8.7	7.6	e4.9	e3.2	e3.0	e3.2	e4.1	8.8	22	9.5	6.2	4.1
5	8.6	7.3	e4.8	e3.2	e3.0	e3.2	e4.2	10	19	9.2	8.8	4.0
6	8.4	7.1	e4.7	e3.1	e3.0	e3.2	e4.3	13	20	8.9	7.6	4.0
7	8.6	7.0	e4.7	e3.1	e3.0	e3.3	e4.4	16	21	8.6	8.1	4.0
8	8.6	7.4	e4.5	e3.1	e2.9	e3.3	e4.4	14	22	8.5	9.2	4.0
9	8.7	e7.7	e4.3	e3.1	e2.9	e3.4	e4.4	11	22	7.6	7.5	4.1
10	8.7	e7.5	e4.0	e3.1	e2.9	e3.5	e4.5	10	22	7.6	6.5	7.3
11	9.5	e7.4	e3.8	e3.1	e2.9	e3.5	e4.5	10	21	7.5	5.8	5.9
12	8.3	e7.2	e3.9	e3.1	e2.9	e3.5	e4.6	14	19	7.0	5.3	6.0
13	8.7	e7.1	e3.8	e3.1	e2.9	e3.5	e4.7	12	18	6.7	5.1	5.9
14	9.1	e6.9	e3.6	e3.1	e2.9	e3.5	e4.7	14	17	6.7	4.8	4.6
15	8.5	e6.8	e3.6	e3.1	e2.9	e3.4	e4.8	14	17	6.6	4.5	4.2
16	8.9	e6.6	e3.5	e3.1	e3.0	e3.3	e4.9	16	15	6.3	4.3	3.9
17	8.2	e6.5	e3.5	e3.1	e3.0	e3.3	e5.0	14	15	6.0	4.2	4.5
18	7.9	e6.4	e3.5	e3.1	e3.0	e3.3	e5.1	18	15	5.9	4.2	6.8
19	8.0	e6.3	e3.5	e3.1	e3.0	e3.3	e5.3	20	14	5.7	4.2	6.3
20	7.8	e6.0	e3.4	e3.1	e3.0	e3.3	e5.4	21	14	5.6	4.5	6.1
21	7.7	e5.9	e3.5	e3.1	e3.0	e3.4	e5.4	26	15	5.9	5.0	6.1
22	8.2	e5.8	e3.5	e3.1	e3.0	e3.4	e5.9	20	14	5.9	5.0	5.6
23	8.4	e5.7	e3.4	e3.1	e3.0	e3.4	6.0	16	13	6.0	4.7	5.3
24	8.2	e5.6	e3.4	e3.0	e3.0	e3.5	6.4	14	13	5.8	4.4	5.3
25	9.5	e5.6	e3.4	e3.0	e3.0	e3.5	6.8	12	12	5.8	4.2	5.3
26	9.8	e5.5	e3.4	e3.0	e3.0	e3.5	7.7	14	12	6.9	4.1	6.9
27	8.0	e5.4	e3.4	e3.0	e3.0	e3.6	7.9	14	11	5.9	4.2	6.8
28	7.7	e5.3	e3.3	e3.0	e3.1	e3.7	7.3	17	11	5.5	4.2	6.7
29	7.5	e5.3	e3.3	e3.0	---	e3.7	7.8	21	10	5.3	4.2	6.6
30	7.5	e5.2	e3.3	e3.0	---	e3.8	9.5	27	9.6	5.2	4.3	6.7
31	7.6	---	e3.3	e3.0	---	e3.9	---	29	---	5.0	4.1	---
TOTAL	262.8	197.2	120.3	95.8	83.3	105.8	162.2	474.8	510.6	213.6	164.7	159.0
MEAN	8.477	6.573	3.881	3.090	2.975	3.413	5.407	15.32	17.02	6.890	5.313	5.300
MAX	9.8	7.9	5.1	3.2	3.1	3.9	9.5	29	27	9.5	9.2	7.3
MIN	7.5	5.2	3.3	3.0	2.9	3.1	4.0	8.5	9.6	5.0	4.1	3.9
AC-FT	521	391	239	190	165	210	322	942	1010	424	327	315

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)

	1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002
MEAN	9.370	7.222	4.685	3.879	3.789	4.017	6.010	35.62	64.76	37.46	19.06	11.15
MAX	10.0	7.63	5.75	5.03	4.45	4.44	6.98	49.7	116	67.1	33.3	15.8
(WY)	2000	2000	2000	2000	2000	1999	2000	2001	1999	1999	1999	1999
MIN	8.48	6.57	3.88	3.09	2.98	3.41	5.33	15.3	17.0	6.89	5.31	5.30
(WY)	2002	2002	2002	2002	2002	2002	1999	2002	2002	2002	2002	2002

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1999 - 2002

ANNUAL TOTAL	7438.1	2550.1		
ANNUAL MEAN	20.38	6.987		
HIGHEST ANNUAL MEAN			17.30	
LOWEST ANNUAL MEAN			25.3	1999
HIGHEST DAILY MEAN	103	Jun 2	6.99	2002
LOWEST DAILY MEAN	e3.3	Jan 17	161	Jun 24 1999
ANNUAL SEVEN-DAY MINIMUM	e3.3	Dec 25	e2.9	Feb 8 2002
MAXIMUM PEAK FLOW			e2.9	Feb 8 2002
MAXIMUM PEAK STAGE			39	May 30
ANNUAL RUNOFF (AC-FT)	14750	5060	5.20	May 30
10 PERCENT EXCEEDS	66	14	217	Jun 23 1999
50 PERCENT EXCEEDS	7.9	5.3	6.34	Jun 23 1999
90 PERCENT EXCEEDS	3.5	3.1	12530	
			49	
			7.4	
			3.7	

e Estimated.

06696980 TARRYALL CREEK AT UPPER STATION, NEAR COMO, CO

LOCATION (REVISED).--Lat 39°20'22", long 105°54'40", in NE¹/₄SW¹/₄ sec.20, T.8 S., R.76 W., Park County, Hydrologic Unit 10190001, on left bank 200 ft upstream from culvert on country road 33, and 1.8 mi northwest of Como.

DRAINAGE AREA.--23.7 mi².

PERIOD OF RECORD.--June 1978 to September 1986. May to September 2002 (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,935 ft above sea level, from topographic map. Prior to July 15, 1980, at site 250 ft downstream at different datum. July 15, 1980 to Sept. 30, 1986 at current site, different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, not determined; maximum daily, 170 ft³/s, June 12, 1980; maximum gage height, 4.39 ft, May 7, 2002, backwater from beaver dam; minimum daily, 1.5 ft³/s, Apr. 5, 1981.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge during period May to September, 16 ft³/s, June 4, gage height, 4.35 ft maximum gage-height, 4.39 ft, May 7, backwater from beaver dam; minimum daily, 2.9 ft³/s, Sept. 6-7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	e7.0	12	5.2	3.2	3.1
2	---	---	---	---	---	---	---	e7.0	12	4.8	3.4	3.1
3	---	---	---	---	---	---	---	e7.5	11	4.9	4.0	3.2
4	---	---	---	---	---	---	---	e7.8	13	4.9	5.0	3.1
5	---	---	---	---	---	---	---	e8.2	12	5.0	5.0	3.0
6	---	---	---	---	---	---	---	e8.5	11	5.1	4.9	2.9
7	---	---	---	---	---	---	---	e8.5	10	5.1	5.6	2.9
8	---	---	---	---	---	---	---	8.7	9.7	4.9	5.1	3.0
9	---	---	---	---	---	---	---	8.3	9.3	4.8	4.5	3.2
10	---	---	---	---	---	---	---	8.2	9.2	4.9	4.0	4.9
11	---	---	---	---	---	---	---	8.2	9.0	4.5	3.8	3.9
12	---	---	---	---	---	---	---	9.4	8.6	4.2	3.7	4.3
13	---	---	---	---	---	---	---	9.7	8.4	4.0	3.6	4.5
14	---	---	---	---	---	---	---	10	8.4	4.1	3.5	4.2
15	---	---	---	---	---	---	---	9.6	8.2	3.9	3.4	3.9
16	---	---	---	---	---	---	---	9.4	8.1	3.7	3.4	3.7
17	---	---	---	---	---	---	---	9.3	7.8	3.5	3.2	3.5
18	---	---	---	---	---	---	---	9.4	7.3	3.4	3.1	3.9
19	---	---	---	---	---	---	---	9.8	7.1	3.2	3.2	4.0
20	---	---	---	---	---	---	---	10	7.1	3.3	3.2	3.7
21	---	---	---	---	---	---	---	11	7.1	3.6	3.6	3.7
22	---	---	---	---	---	---	---	11	7.1	3.8	3.6	3.7
23	---	---	---	---	---	---	---	10	6.7	4.6	3.6	3.8
24	---	---	---	---	---	---	---	12	6.3	4.0	3.5	3.7
25	---	---	---	---	---	---	---	11	6.2	3.8	3.4	3.7
26	---	---	---	---	---	---	---	11	6.2	4.2	3.6	3.9
27	---	---	---	---	---	---	---	11	6.2	3.7	3.3	e4.0
28	---	---	---	---	---	---	---	10	6.1	3.5	3.2	e4.0
29	---	---	---	---	---	---	---	9.9	6.0	3.3	3.2	e4.0
30	---	---	---	---	---	---	---	10	5.6	3.2	3.2	4.1
31	---	---	---	---	---	---	---	11	---	3.3	3.1	---
TOTAL	---	---	---	---	---	---	---	292.4	252.7	128.4	116.1	110.6
MEAN	---	---	---	---	---	---	---	9.432	8.423	4.142	3.745	3.687
MAX	---	---	---	---	---	---	---	12	13	5.2	5.6	4.9
MIN	---	---	---	---	---	---	---	7.0	5.6	3.2	3.1	2.9
AC-FT	---	---	---	---	---	---	---	580	501	255	230	219

e Estimated.

06701500 SOUTH PLATTE RIVER BELOW CHEESMAN LAKE, CO

LOCATION.--Lat 39°12'33", long 105°16'02", in SE ¼ NW ¼ sec.6, T.10 S., R.70 W., Jefferson County, Hydrologic Unit 10190002, on left bank 1,400 ft downstream from toe of Cheesman Dam, and 3.8 mi southwest of Deckers.

DRAINAGE AREA.--1,752 mi².

PERIOD OF RECORD.--October 1924 to September 1998, October 2001 to September 2002. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1310: 1949. WSP 1730: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry, and Marshall flume. Datum of gage is 6,609.29 ft above sea level. Prior to May 14, 1956, at site 370 ft upstream at datum 0.50 ft higher.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by minor transmountain diversion from Colorado River basin through Boreas Pass ditch, Antero and Elevenmile Canyon Reservoirs, diversions for irrigation of about 40,000 acres, and return flow from irrigated areas. Flow completely regulated by Cheesman Lake (station 06701000).

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	319	132	130	110	99	53	75	254	368	121	346	302
2	319	124	128	108	99	53	75	228	329	301	346	361
3	275	124	111	110	99	53	75	207	327	379	322	405
4	243	124	98	109	88	53	75	238	275	377	300	404
5	243	160	98	108	81	50	75	258	244	375	241	403
6	243	189	86	108	81	50	110	257	244	300	250	403
7	243	189	78	108	81	50	143	257	244	244	305	403
8	243	158	78	108	80	51	144	256	244	273	269	372
9	242	130	78	108	78	51	144	258	242	291	247	327
10	242	157	78	106	78	51	144	257	242	327	248	269
11	210	181	78	92	78	51	144	257	242	367	247	199
12	189	181	78	83	78	51	144	257	240	364	249	170
13	189	179	78	84	78	51	162	226	240	365	251	154
14	189	180	78	84	78	52	179	205	272	363	258	119
15	189	180	78	84	78	53	210	235	292	361	280	119
16	214	170	79	84	78	53	234	287	290	360	363	160
17	230	160	79	84	78	53	209	308	289	357	397	241
18	189	160	79	84	78	53	177	308	289	355	397	273
19	123	142	79	84	65	53	178	307	320	354	397	272
20	101	130	79	84	56	53	178	324	340	353	400	197
21	79	130	79	84	56	53	142	341	339	353	403	121
22	52	130	79	84	56	53	117	338	338	331	313	107
23	53	160	79	84	56	54	171	338	338	263	254	109
24	53	181	79	84	56	54	245	338	338	159	256	110
25	81	181	78	109	56	54	274	314	338	251	259	163
26	126	180	78	130	54	54	241	300	338	313	305	198
27	147	180	78	130	53	55	196	299	316	313	406	196
28	148	179	92	130	53	56	196	327	192	313	461	196
29	148	179	111	113	---	64	196	391	39	313	405	196
30	148	151	110	99	---	75	229	420	41	291	370	253
31	148	---	110	99	---	75	---	420	---	309	333	---
TOTAL	5618	4801	2721	3076	2049	1685	4882	9010	8190	9796	9878	7202
MEAN	181	160	87.8	99.2	73.2	54.4	163	291	273	316	319	240
MAX	319	189	130	130	99	75	274	420	368	379	461	405
MIN	52	124	78	83	53	50	75	205	39	121	241	107
AC-FT	11140	9520	5400	6100	4060	3340	9680	17870	16240	19430	19590	14290

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2002, BY WATER YEAR (WY)

	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	131	68.5	52.0	56.9	55.0	56.2	147	283	333	360	344	204																																																																		
MAX	380	266	184	156	169	208	932	1716	1088	1451	984	517																																																																		
(WY)	1985	1985	1996	1998	1998	1986	1942	1970	1995	1995	1984	1998																																																																		
MIN	12.9	6.33	5.26	5.26	2.76	3.11	2.00	11.0	38.5	53.5	66.7	33.5																																																																		
(WY)	1965	1960	1926	1926	1957	1957	1957	1938	1989	1967	1978	1978																																																																		

SUMMARY STATISTICS

FOR 2002 WATER YEAR

WATER YEARS 1925 - 2002

ANNUAL TOTAL	68908		
ANNUAL MEAN	189	175	
HIGHEST ANNUAL MEAN		450	1970
LOWEST ANNUAL MEAN		60.1	1978
HIGHEST DAILY MEAN	461	Aug 28	4580
LOWEST DAILY MEAN	39	Jun 29	1.6
ANNUAL SEVEN-DAY MINIMUM	51	Mar 5	1.6
MAXIMUM PEAK FLOW	469	Aug 27	4640
MAXIMUM PEAK STAGE	2.48	Aug 27	13.40
ANNUAL RUNOFF (AC-FT)	136700		126800
10 PERCENT EXCEEDS	346		429
50 PERCENT EXCEEDS	178		98
90 PERCENT EXCEEDS	56		19

a Also occurred Apr 9-14, 1957.

392144105132401 SPRING CREEK RAIN GAGE AT LONG SCraggy RANCH, CO

PRECIPITATION RECORDS

LOCATION.--Lat 39°21'44", long 105°13'24", in SW¹/₄SE¹/₄ sec.9, T.8 S., R.70 W., Jefferson County, Hydrologic Unit 10190002, on left bank of Spring Creek along road to Long Scraggy Ranch, 0.2 mi from Spring Creek Road, and 3.0 mi southeast of the community of Buffalo Creek.

PERIOD OF RECORD.--April 1997 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage, with wind shields, with satellite telemetry. Elevation of gage is 7,280 ft above sea level, from topographic map.

REMARKS.--Records good. Equipment malfunction April 1 to May 30, no data available.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily rainfall, 1.75 inches, May 25, 1999.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum recorded daily rainfall, 0.92 inches, July 6.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00
2	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00
3	---	---	---	---	---	---	---	---	0.00	0.01	0.12	---
4	---	---	---	---	---	---	---	---	0.63	0.00	0.06	---
5	---	---	---	---	---	---	---	---	0.00	0.02	0.21	---
6	---	---	---	---	---	---	---	---	0.00	0.92	0.13	---
7	---	---	---	---	---	---	---	---	0.00	0.01	0.04	---
8	---	---	---	---	---	---	---	---	0.00	0.00	0.00	---
9	---	---	---	---	---	---	---	---	0.00	0.00	0.00	---
10	---	---	---	---	---	---	---	---	0.00	0.01	0.00	0.26
11	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00
12	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.22
13	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.06
14	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00
15	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00
16	---	---	---	---	---	---	---	---	0.05	0.00	0.00	0.00
17	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00
18	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.48
19	---	---	---	---	---	---	---	---	0.04	0.00	0.00	0.01
20	---	---	---	---	---	---	---	---	0.01	0.00	0.00	0.00
21	---	---	---	---	---	---	---	---	0.08	0.05	0.18	0.00
22	---	---	---	---	---	---	---	---	0.00	0.02	0.15	0.00
23	---	---	---	---	---	---	---	---	0.01	0.00	0.01	0.00
24	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00
26	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.30
27	---	---	---	---	---	---	---	---	0.01	0.00	0.23	0.00
28	---	---	---	---	---	---	---	---	0.00	0.00	0.15	0.00
29	---	---	---	---	---	---	---	---	0.00	0.00	0.19	0.00
30	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00
31	---	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	---	---	0.83	1.04	1.47	---

06701970 SPRING CREEK ABOVE MOUTH NEAR SOUTH PLATTE, CO

LOCATION.--Lat 39°23'37", long 105°11'01", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.35, T.7 S., R.70 W., Jefferson County, Hydrologic Unit 10190002, on right bank 0.9 mi upstream from mouth and 1.3 mi southwest of the community of South Platte.

DRAINAGE AREA.--9.79 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1997 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,320 ft above sea level, from topographic map.

REMARKS.--Records poor. No diversion or regulation upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data for Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 6,380 ft³/s, Aug. 31, 1997, gage height, 13.45 ft, from slope-area measurement of peak flow; minimum daily, 0.37 ft³/s, June 26, 2002.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 2.3 ft³/s July 10, gage height, 4.55 ft; minimum daily, 0.37 ft³/s, June 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.97	---	---	---	---	---	0.67	0.64	0.59	0.38	0.41	0.46
2	0.92	---	---	---	---	---	0.76	0.64	0.56	0.38	0.41	0.44
3	0.95	---	---	---	---	---	0.81	0.62	0.58	0.39	0.43	0.43
4	0.98	---	---	---	---	---	0.82	0.58	0.72	0.39	0.44	0.43
5	0.98	---	---	---	---	---	0.82	0.54	0.72	0.38	0.46	0.43
6	0.93	---	---	---	---	---	0.86	0.55	0.63	0.49	0.47	0.43
7	0.93	---	---	---	---	---	0.86	0.55	0.57	0.49	0.53	0.47
8	0.93	---	---	---	---	---	0.76	0.60	0.52	0.43	0.53	0.47
9	0.95	---	---	---	---	---	0.76	0.55	0.49	0.49	0.52	0.52
10	0.97	---	---	---	---	---	0.91	0.50	0.50	0.60	0.49	0.57
11	0.96	---	---	---	---	---	0.77	0.50	0.50	0.40	0.47	0.57
12	0.88	---	---	---	---	---	0.76	0.63	0.49	0.40	0.47	0.60
13	0.80	---	---	---	---	---	0.68	0.55	0.47	0.38	0.47	0.58
14	0.82	---	---	---	---	---	0.60	0.50	0.47	0.38	0.43	0.55
15	0.82	---	---	---	---	---	0.59	0.54	0.48	0.39	0.43	0.59
16	0.83	---	---	---	---	---	0.62	0.58	0.47	0.39	0.42	0.56
17	0.81	---	---	---	---	---	0.64	0.62	0.45	0.38	0.41	0.54
18	0.77	---	---	---	---	---	0.61	0.58	0.43	0.42	0.41	0.58
19	0.75	---	---	---	---	---	0.65	0.56	0.42	0.42	0.41	0.55
20	0.76	---	---	---	---	---	0.62	0.58	0.45	0.42	0.41	0.56
21	0.76	---	---	---	---	---	0.60	0.59	0.43	0.42	0.44	0.56
22	0.77	---	---	---	---	---	0.56	0.58	0.42	0.42	0.48	0.54
23	0.74	---	---	---	---	---	0.55	0.58	0.40	0.42	0.47	0.58
24	0.70	---	---	---	---	---	0.57	0.79	0.39	0.45	0.47	0.58
25	0.71	---	---	---	---	---	0.54	0.92	0.38	0.44	0.47	0.58
26	e0.70	---	---	---	---	---	0.60	0.81	0.37	0.44	0.44	0.61
27	e0.70	---	---	---	---	---	0.62	0.73	0.38	0.44	0.46	0.62
28	e0.70	---	---	---	---	---	0.60	0.68	0.42	0.44	0.48	0.62
29	e0.70	---	---	---	---	---	0.59	0.61	0.40	0.42	0.48	0.60
30	e0.70	---	---	---	---	---	0.57	0.61	0.39	0.42	0.48	0.60
31	e0.70	---	---	---	---	---	---	0.60	---	0.41	0.49	---
TOTAL	25.59	---	---	---	---	---	20.37	18.91	14.49	13.12	14.18	16.22
MEAN	0.825	---	---	---	---	---	0.679	0.610	0.483	0.423	0.457	0.541
MAX	0.98	---	---	---	---	---	0.91	0.92	0.72	0.60	0.53	0.62
MIN	0.70	---	---	---	---	---	0.54	0.50	0.37	0.38	0.41	0.43
AC-FT	51	---	---	---	---	---	40	38	29	26	28	32

e Estimated.

06701970 SPRING CREEK ABOVE MOUTH NEAR SOUTH PLATTE, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 1997 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage (no wind shields used) with satellite telemetry.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily rainfall, 2.38 inches, July 16, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily rainfall, 0.81 inches, July 6.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
2	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
3	---	---	---	---	---	---	0.00	0.00	0.00	0.09	0.10	0.00
4	---	---	---	---	---	---	0.00	0.00	0.56	0.00	0.03	0.00
5	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.21	0.00
6	---	---	---	---	---	---	0.00	0.00	0.00	0.81	0.02	0.00
7	---	---	---	---	---	---	0.01	0.00	0.00	0.00	0.02	0.00
8	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.02
9	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.36
10	---	---	---	---	---	---	0.00	0.00	0.00	0.14	0.00	0.25
11	---	---	---	---	---	---	0.05	0.01	0.00	0.00	0.00	0.00
12	---	---	---	---	---	---	0.00	0.09	0.00	0.00	0.00	0.08
13	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.02
14	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
15	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
16	---	---	---	---	---	---	0.00	0.19	0.01	0.00	0.00	0.00
17	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
18	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.51
19	---	---	---	---	---	---	0.00	0.00	0.01	0.24	0.00	0.01
20	---	---	---	---	---	---	0.00	0.02	0.01	0.00	0.00	0.00
21	---	---	---	---	---	---	0.00	0.00	0.09	0.12	0.01	0.00
22	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.15	0.00
23	---	---	---	---	---	---	0.00	0.14	0.01	0.00	0.00	0.00
24	---	---	---	---	---	---	0.00	0.50	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
26	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.29
27	---	---	---	---	---	---	0.01	0.00	0.00	0.00	0.10	0.00
28	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.13	0.02
29	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.08	0.00
30	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
31	---	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	0.07	0.95	0.69	1.40	0.85	1.56

PLATTE RIVER BASIN

06706350 WANDCREST GULCH NEAR PINE, CO

PRECIPITATION RECORDS

LOCATION.--Lat 39°24'41", long 105°21'44", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.29, T.7 S., R.71 W., Jefferson County, Hydrologic Unit 10190002, on left bank, approximately 600 ft above mouth, and 2 mi west of the community of Pine.

PERIOD OF RECORD.--April 2001 to September 2002 (seasonal records only), discontinued.

GAGE.--Tipping-bucket rain gage (no wind shields used) with satellite telemetry. Elevation of gage is 6,905 ft above sea level, from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily rainfall, 1.15 inches, May 5, 2001.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily rainfall, 0.68 inches, Aug. 5.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	0.00	0.00	0.01	0.00	0.00	0.00
2	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
3	---	---	---	---	---	---	0.00	0.01	0.01	0.00	0.16	0.01
4	---	---	---	---	---	---	0.00	0.00	0.50	0.00	0.02	0.01
5	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.68	0.00
6	---	---	---	---	---	---	0.00	0.00	0.00	0.44	0.01	0.00
7	---	---	---	---	---	---	0.01	0.00	0.00	0.00	0.03	0.00
8	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.03	0.04
9	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.59
10	---	---	---	---	---	---	0.00	0.00	0.00	0.57	0.00	0.25
11	---	---	---	---	---	---	0.00	0.04	0.00	0.01	0.00	0.01
12	---	---	---	---	---	---	0.00	0.14	0.00	0.00	0.00	0.13
13	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.09
14	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
15	---	---	---	---	---	---	0.00	0.02	0.00	0.00	0.00	0.00
16	---	---	---	---	---	---	0.00	0.29	0.00	0.00	0.00	0.00
17	---	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00	0.00
18	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.66
19	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.01	0.01
20	---	---	---	---	---	---	0.01	0.01	0.06	0.00	0.00	0.00
21	---	---	---	---	---	---	0.00	0.01	0.12	0.12	0.03	0.00
22	---	---	---	---	---	---	0.00	0.00	0.00	0.01	0.07	0.00
23	---	---	---	---	---	---	0.00	0.21	0.01	0.00	0.00	0.00
24	---	---	---	---	---	---	0.00	0.53	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.01
26	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.25
27	---	---	---	---	---	---	0.02	0.00	0.04	0.00	0.03	0.00
28	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.02	0.00
29	---	---	---	---	---	---	0.00	0.00	0.00	0.03	0.23	0.00
30	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
31	---	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	0.04	1.27	0.75	1.18	1.32	2.06
MAX	---	---	---	---	---	---	0.02	0.53	0.50	0.57	0.68	0.66
MIN	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00

06706400 NORTH FORK SOUTH PLATTE RIVER ABOVE ELK CREEK AT PINE, CO

LOCATION.--Lat 39°24'27", long 105°19'07", in NE¹/₄SE¹/₄ sec.27, T.7 S., R.71 W., Jefferson County, Hydrologic Unit 10190002, on left bank 500 ft upstream of Elk Creek and in the community of Pine.

DRAINAGE AREA.--310 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 2000 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,720 ft above sea level, from topographic map.

REMARKS.--Records good. Transmountain diversions from Colorado River Basin enter above this station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 779 ft³/s, June 9, 2001, gage height, 4.95 ft; minimum daily, 5.7 ft³/s, Sept. 2, 2002.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 729 ft³/s, June 29, gage height, 4.87 ft; minimum daily, 5.7 ft³/s, Sept. 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	367	---	---	---	---	---	143	360	367	629	382	5.9
2	333	---	---	---	---	---	145	339	324	391	381	5.7
3	255	---	---	---	---	---	151	291	226	290	385	5.8
4	201	---	---	---	---	---	153	309	257	309	405	19
5	201	---	---	---	---	---	151	357	265	342	377	40
6	201	---	---	---	---	---	170	380	260	313	306	41
7	200	---	---	---	---	---	252	422	237	252	302	42
8	199	---	---	---	---	---	245	421	251	319	300	44
9	197	---	---	---	---	---	244	420	289	339	289	51
10	195	---	---	---	---	---	235	430	289	383	281	72
11	183	---	---	---	---	---	233	424	286	382	275	67
12	151	---	---	---	---	---	231	414	303	379	275	64
13	155	---	---	---	---	---	229	351	348	376	276	66
14	157	---	---	---	---	---	264	365	347	380	273	61
15	159	---	---	---	---	---	319	384	348	382	270	56
16	164	---	---	---	---	---	312	438	348	379	216	54
17	228	---	---	---	---	---	286	388	345	375	125	65
18	282	---	---	---	---	---	237	221	343	376	88	132
19	311	---	---	---	---	---	218	219	332	374	88	142
20	312	---	---	---	---	---	216	229	276	368	88	128
21	312	---	---	---	---	---	208	293	287	375	82	85
22	328	---	---	---	---	---	222	285	280	381	59	82
23	358	---	---	---	---	---	294	282	270	379	58	80
24	357	---	---	---	---	---	357	303	299	236	64	81
25	328	---	---	---	---	---	358	276	362	396	104	80
26	255	---	---	---	---	---	356	239	375	403	125	85
27	198	---	---	---	---	---	359	200	401	398	114	84
28	198	---	---	---	---	---	356	203	550	393	79	86
29	194	---	---	---	---	---	355	233	705	391	21	87
30	179	---	---	---	---	---	357	230	704	386	9.6	86
31	119	---	---	---	---	---	---	276	---	382	7.0	---
TOTAL	7277	---	---	---	---	---	7656	9982	10274	11458	6104.6	1997.4
MEAN	234.7	---	---	---	---	---	255.2	322.0	342.5	369.6	196.9	66.58
MAX	367	---	---	---	---	---	359	438	705	629	405	142
MIN	119	---	---	---	---	---	143	200	226	236	7.0	5.7
AC-FT	14430	---	---	---	---	---	15190	19800	20380	22730	12110	3960

PLATTE RIVER BASIN

06706400 NORTH FORK SOUTH PLATTE RIVER ABOVE ELK CREEK AT PINE, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 2001 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage (no wind shields used) with satellite telemetry.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily rainfall, 1.89 inches, Aug. 28, 2000 (occurred during period not published).

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily rainfall, 1.44 inches, Aug. 5.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
2	---	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00	0.00
3	---	---	---	---	---	---	0.00	0.00	0.11	0.00	0.17	0.00
4	---	---	---	---	---	---	0.00	0.00	0.64	0.00	0.09	0.00
5	---	---	---	---	---	---	0.00	0.00	0.00	0.00	1.44	0.00
6	---	---	---	---	---	---	0.00	0.00	0.00	0.58	0.01	0.00
7	---	---	---	---	---	---	0.02	0.00	0.00	0.00	0.10	0.00
8	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.01	0.03
9	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.46
10	---	---	---	---	---	---	0.00	0.00	0.00	0.69	0.00	0.33
11	---	---	---	---	---	---	0.01	0.04	0.00	0.00	0.00	0.00
12	---	---	---	---	---	---	0.00	0.11	0.00	0.00	0.00	0.18
13	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.12
14	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
15	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
16	---	---	---	---	---	---	0.00	0.42	0.00	0.00	0.00	0.00
17	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
18	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.66
19	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.02	0.00
20	---	---	---	---	---	---	0.00	0.01	0.07	0.00	0.00	0.00
21	---	---	---	---	---	---	0.00	0.00	0.18	0.19	0.08	0.00
22	---	---	---	---	---	---	0.00	0.00	0.00	0.01	0.13	0.00
23	---	---	---	---	---	---	0.00	0.32	0.02	0.00	0.00	0.00
24	---	---	---	---	---	---	0.00	0.18	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	0.00	0.00	0.01	0.00	0.00	0.00
26	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.35
27	---	---	---	---	---	---	0.01	0.00	0.04	0.00	0.02	0.00
28	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.03	0.01
29	---	---	---	---	---	---	0.00	0.00	0.00	0.03	0.81	0.00
30	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
31	---	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	0.04	1.09	1.07	1.50	2.91	2.14

06706600 MILLER GULCH NEAR BUFFALO CREEK, CO

LOCATION.--Lat 39°23'31", long 105°17'03", in SW¹/₄SE¹/₄ sec.36, T.7 S., R.71 W., Jefferson County, Hydrologic Unit 10190002, on right bank, 1200 ft upstream from mouth and 0.5 mi northwest of the community of Buffalo Creek.

DRAINAGE AREA.--3.16 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 2000 to September 2002 (seasonal records only), discontinued.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6675 ft above sea level, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 240 ft³/s (estimated), July 17, 2000, gage height 8.56 ft; from high water marks; minimum daily, 0.11 ft³/s, Aug. 1-2, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, not determined; minimum daily, 0.15 ft³/s, May 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	e0.25	0.28	0.21	0.17	e0.19	e0.18
2	---	---	---	---	---	---	e0.25	0.29	0.20	0.18	e0.19	e0.18
3	---	---	---	---	---	---	e0.25	0.29	0.21	e0.18	e0.19	e0.18
4	---	---	---	---	---	---	e0.25	0.30	0.35	e0.18	e0.19	e0.18
5	---	---	---	---	---	---	e0.25	0.30	0.30	e0.19	e0.19	e0.18
6	---	---	---	---	---	---	e0.25	0.30	0.26	e0.20	e0.19	e0.18
7	---	---	---	---	---	---	e0.24	0.27	0.24	e0.24	e0.19	e0.18
8	---	---	---	---	---	---	e0.24	0.17	0.22	0.24	e0.19	e0.18
9	---	---	---	---	---	---	e0.24	0.15	0.19	0.23	e0.19	e0.18
10	---	---	---	---	---	---	e0.24	0.15	0.21	0.20	e0.19	e0.17
11	---	---	---	---	---	---	e0.24	0.16	0.20	0.20	e0.19	e0.17
12	---	---	---	---	---	---	e0.24	0.17	0.20	0.20	e0.19	e1.5
13	---	---	---	---	---	---	e0.24	0.18	0.18	0.20	e0.19	e0.30
14	---	---	---	---	---	---	e0.23	0.19	0.18	e0.19	e0.19	e0.27
15	---	---	---	---	---	---	e0.23	0.18	0.17	e0.19	e0.19	e0.25
16	---	---	---	---	---	---	e0.23	0.19	0.18	e0.19	e0.18	e0.22
17	---	---	---	---	---	---	e0.23	0.21	0.19	e0.19	e0.18	e0.21
18	---	---	---	---	---	---	0.22	0.20	0.18	e0.19	e0.18	e0.21
19	---	---	---	---	---	---	0.23	0.20	0.18	e0.19	e0.18	e0.21
20	---	---	---	---	---	---	0.24	0.20	0.19	e0.19	e0.18	e0.20
21	---	---	---	---	---	---	0.24	0.22	0.17	e0.19	e0.18	e0.20
22	---	---	---	---	---	---	0.23	0.21	0.19	e0.19	e0.18	e0.20
23	---	---	---	---	---	---	0.24	0.20	0.20	e0.19	e0.18	e0.21
24	---	---	---	---	---	---	0.24	0.47	0.19	e0.19	e0.18	e0.21
25	---	---	---	---	---	---	0.25	0.36	0.18	e0.19	e0.18	e0.21
26	---	---	---	---	---	---	0.26	0.29	0.19	e0.19	e0.18	e0.21
27	---	---	---	---	---	---	0.26	0.27	0.19	e0.19	e0.18	e0.21
28	---	---	---	---	---	---	0.26	0.26	0.18	e0.19	e0.18	e0.22
29	---	---	---	---	---	---	0.26	0.26	0.18	e0.19	e0.18	e0.20
30	---	---	---	---	---	---	0.27	0.23	0.19	e0.19	e0.18	e0.19
31	---	---	---	---	---	---	---	0.22	---	e0.19	e0.18	---
TOTAL	---	---	---	---	---	---	7.30	7.37	6.10	6.03	5.73	7.39
MEAN	---	---	---	---	---	---	0.243	0.238	0.203	0.195	0.185	0.246
MAX	---	---	---	---	---	---	0.27	0.47	0.35	0.24	0.19	1.5
MIN	---	---	---	---	---	---	0.22	0.15	0.17	0.17	0.18	0.17
AC-FT	---	---	---	---	---	---	14	15	12	12	11	15

e Estimated.

PLATTE RIVER BASIN

06706600 MILLER GULCH NEAR BUFFALO CREEK, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 2001 to September 2002 (seasonal records only), discontinued.

GAGE.--Tipping-bucket rain gage (no wind shields used) with satellite telemetry.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily rainfall, 1.09 inches, Sept. 12, 2002.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily rainfall, 1.09 inches, Sept. 12.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
2	---	---	---	---	---	---	0.00	0.02	0.00	0.00	0.00	0.00
3	---	---	---	---	---	---	0.00	0.00	0.03	0.00	0.15	0.00
4	---	---	---	---	---	---	0.02	0.00	0.55	0.00	0.04	0.00
5	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.33	0.00
6	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.02	0.00
7	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.08	0.00
8	---	---	---	---	---	---	0.01	0.00	0.00	0.00	0.02	0.06
9	---	---	---	---	---	---	0.00	0.00	0.00	0.01	0.00	0.40
10	---	---	---	---	---	---	0.00	0.00	0.00	0.08	0.00	0.25
11	---	---	---	---	---	---	0.06	0.03	0.00	0.00	0.00	0.00
12	---	---	---	---	---	---	0.00	0.07	0.00	0.00	0.00	1.09
13	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.12
14	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
15	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
16	---	---	---	---	---	---	0.00	0.24	0.00	0.00	0.00	0.00
17	---	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00	0.00
18	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.52
19	---	---	---	---	---	---	0.00	0.00	0.03	0.00	0.02	0.00
20	---	---	---	---	---	---	0.00	0.05	0.10	0.00	0.00	0.00
21	---	---	---	---	---	---	0.00	0.01	0.09	0.07	0.10	0.00
22	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.04	0.00
23	---	---	---	---	---	---	0.00	0.32	0.00	0.00	0.00	0.00
24	---	---	---	---	---	---	0.00	0.56	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
26	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.30
27	---	---	---	---	---	---	0.00	0.00	0.01	0.00	0.03	0.00
28	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.02	0.09
29	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.37	0.00
30	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
31	---	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	0.09	1.31	0.81	0.16	1.22	2.83
MEAN	---	---	---	---	---	---	0.00	0.04	0.03	0.01	0.04	0.09
MAX	---	---	---	---	---	---	0.06	0.56	0.55	0.08	0.37	1.09

392133105184401 BUFFALO CREEK RAIN GAGE AT MORRISON CREEK, CO

PRECIPITATION RECORDS

LOCATION.--Lat 39°21'33", long 105°18'44", in SW¹/₄SW¹/₄ sec.11, T.8 S., R.71 W., Jefferson County, Hydrologic Unit 10190002, on left bank of Buffalo Creek near confluence with Morrison Creek, and 3.0 mi southwest of the community of Buffalo Creek.

PERIOD OF RECORD.--April 1997 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage (with wind shields) with satellite telemetry. Elevation of gage is 7,120 ft above sea level, from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily rainfall, 1.67 inches, June 6, 1997.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily rainfall, 0.70 inches, May 24.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
2	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
3	---	---	---	---	---	---	0.00	0.00	0.04	0.00	0.10	0.00
4	---	---	---	---	---	---	0.10	0.00	0.58	0.00	0.00	0.00
5	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.62	0.00
6	---	---	---	---	---	---	0.00	0.00	0.00	0.16	0.02	0.00
7	---	---	---	---	---	---	0.01	0.00	0.00	0.00	0.10	0.00
8	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.04
9	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.20
10	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.04
11	---	---	---	---	---	---	0.00	0.03	0.00	0.00	0.00	0.00
12	---	---	---	---	---	---	0.00	0.05	0.00	0.00	0.00	0.30
13	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.04
14	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
15	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
16	---	---	---	---	---	---	0.00	0.13	0.00	0.00	0.00	0.00
17	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
18	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.38
19	---	---	---	---	---	---	0.00	0.00	0.02	0.00	0.00	0.00
20	---	---	---	---	---	---	0.01	0.05	0.08	0.00	0.00	0.00
21	---	---	---	---	---	---	0.00	0.01	0.04	0.02	0.03	0.00
22	---	---	---	---	---	---	0.00	0.00	0.00	0.01	0.05	0.00
23	---	---	---	---	---	---	0.00	0.15	0.01	0.00	0.00	0.00
24	---	---	---	---	---	---	0.00	0.70	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
26	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.24
27	---	---	---	---	---	---	0.00	0.00	0.01	0.00	0.06	0.00
28	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.02	0.09
29	---	---	---	---	---	---	0.00	0.00	0.00	0.01	0.50	0.00
30	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
31	---	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	0.12	1.12	0.78	0.20	1.50	1.33

06706800 BUFFALO CREEK AT MOUTH AT BUFFALO CREEK, CO

LOCATION.--Lat 39°23'27", long 105°16'15", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.31, T.7 S., R.70 W., Jefferson County, Hydrologic Unit 10190002, on left bank 0.2 mi downstream from State Highway 67, 0.5 mi upstream from mouth, and in the community of Buffalo Creek.

DRAINAGE AREA.--47.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1997 to current year (seasonal records only).

REVISED RECORDS.--WDR CO-00-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6630 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow is slightly regulated by Wellington Lake 7.2 mi upstream. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 3,400 ft³/s, July 31, 2001, gage height, 10.80 ft; from high water marks; minimum daily, 0.49 ft³/s, July 30, 2002.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 27 ft³/s, Sept. 26, gage height, 3.78 ft; minimum daily, 0.49 ft³/s, July 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	---	---	---	---	---	4.6	2.8	1.9	1.3	e0.55	2.4
2	2.6	---	---	---	---	---	4.5	2.9	1.4	1.3	e0.60	2.0
3	2.5	---	---	---	---	---	3.3	2.8	1.7	1.3	0.49	1.9
4	2.6	---	---	---	---	---	3.9	2.6	4.4	1.3	0.75	1.9
5	2.6	---	---	---	---	---	4.2	2.5	6.4	0.97	0.96	1.7
6	2.7	---	---	---	---	---	4.2	2.3	4.2	2.3	2.4	1.9
7	2.7	---	---	---	---	---	4.4	2.2	3.2	1.3	1.6	1.7
8	2.6	---	---	---	---	---	4.2	2.3	2.1	0.94	1.3	1.8
9	2.6	---	---	---	---	---	4.0	2.1	e2.0	0.80	1.0	2.1
10	2.6	---	---	---	---	---	4.2	2.0	e1.9	0.90	1.1	5.2
11	2.7	---	---	---	---	---	4.1	1.6	e1.9	0.86	1.1	4.1
12	2.7	---	---	---	---	---	3.9	2.6	e1.9	e0.90	1.0	4.5
13	2.8	---	---	---	---	---	3.8	2.7	e1.8	e1.0	1.1	3.7
14	2.7	---	---	---	---	---	4.0	2.7	e1.8	e1.0	1.0	3.3
15	2.7	---	---	---	---	---	4.3	2.5	e1.8	e1.1	1.0	2.5
16	2.8	---	---	---	---	---	4.3	2.8	e1.7	e1.0	0.94	2.4
17	2.8	---	---	---	---	---	3.7	3.2	e1.7	e0.90	1.3	3.7
18	2.7	---	---	---	---	---	3.5	2.7	e1.6	e0.90	0.87	4.6
19	2.7	---	---	---	---	---	3.5	2.4	e1.6	e0.90	0.99	6.4
20	2.7	---	---	---	---	---	3.5	2.3	e1.6	e0.80	1.1	5.3
21	2.7	---	---	---	---	---	3.4	2.5	e1.7	e0.85	4.2	4.9
22	2.7	---	---	---	---	---	3.1	1.1	1.8	0.72	8.1	4.8
23	2.5	---	---	---	---	---	3.0	0.79	1.7	0.98	10	7.5
24	2.4	---	---	---	---	---	3.0	5.2	1.7	1.0	11	22
25	2.5	---	---	---	---	---	3.1	5.0	2.0	0.83	12	24
26	2.6	---	---	---	---	---	3.1	4.8	1.9	0.82	11	25
27	2.6	---	---	---	---	---	3.2	3.8	2.1	0.81	10	25
28	e2.6	---	---	---	---	---	2.9	3.5	2.1	0.59	10	24
29	2.6	---	---	---	---	---	2.8	3.0	1.5	0.51	4.9	23
30	e2.8	---	---	---	---	---	2.7	2.7	1.5	0.49	3.6	21
31	e2.7	---	---	---	---	---	---	2.5	---	e0.50	2.8	---
TOTAL	82.1	---	---	---	---	---	110.4	84.89	64.6	29.87	108.75	244.3
MEAN	2.648	---	---	---	---	---	3.680	2.738	2.153	0.964	3.508	8.143
MAX	2.8	---	---	---	---	---	4.6	5.2	6.4	2.3	12	25
MIN	2.4	---	---	---	---	---	2.7	0.79	1.4	0.49	0.49	1.7
AC-FT	163	---	---	---	---	---	219	168	128	59	216	485

e Estimated.

PLATTE RIVER BASIN

06706800 BUFFALO CREEK AT MOUTH AT BUFFALO CREEK , CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--June 1997 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage (no wind shields used) with satellite telemetry.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily rainfall, 1.63 inches, May 25, 1999.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily rainfall, 0.69 inches, July 6.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
2	---	---	---	---	---	---	0.00	0.02	0.00	0.00	0.00	0.00
3	---	---	---	---	---	---	0.00	0.00	0.02	0.00	0.18	0.00
4	---	---	---	---	---	---	0.00	0.00	0.60	0.00	0.06	0.00
5	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.28	0.00
6	---	---	---	---	---	---	0.00	0.00	0.00	0.69	0.04	0.00
7	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.14	0.00
8	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.01	0.03
9	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.40
10	---	---	---	---	---	---	0.00	0.00	0.00	0.03	0.00	0.23
11	---	---	---	---	---	---	0.03	0.03	0.00	0.00	0.00	0.01
12	---	---	---	---	---	---	0.00	0.06	0.00	0.00	0.00	0.55
13	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.09
14	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
15	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
16	---	---	---	---	---	---	0.00	0.22	0.02	0.00	0.00	0.00
17	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
18	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.49
19	---	---	---	---	---	---	0.00	0.00	0.01	0.00	0.01	0.00
20	---	---	---	---	---	---	0.00	0.03	0.06	0.00	0.00	0.00
21	---	---	---	---	---	---	0.00	0.00	0.10	0.05	0.10	0.00
22	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.08	0.00
23	---	---	---	---	---	---	0.00	0.27	0.00	0.00	0.00	0.00
24	---	---	---	---	---	---	0.00	0.52	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
26	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.28
27	---	---	---	---	---	---	0.00	0.00	0.01	0.00	0.04	0.00
28	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.03	0.03
29	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.41	0.01
30	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
31	---	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	0.03	1.15	0.82	0.77	1.38	2.12

06707500 SOUTH PLATTE RIVER AT SOUTH PLATTE, CO

LOCATION.--Lat 39°24'33", long 105°10'10", in SE¹/₄ sec.25, T.7 S., R.70 W., Jefferson County, Hydrologic Unit 10190002, on left bank at South Platte, 200 ft downstream from bridge on State Highway 75, and 400 ft downstream from North Fork South Platte River.

DRAINAGE AREA.--2,579 mi².

PERIOD OF RECORD.--July 1887 to September 1891, May to October 1892, October 1895 to September 1897, October 1898 to June 1900, October 1900 to September 1982, October 2001 to September 2002. Monthly discharge only for some periods, published in WSP 1310. Published as "at" or "near Deansbury," "at Deansbury and Platte Canyon," "at" or "near Platte Canyon," prior to 1901, and "below North Fork, at South Platte" 1914.

REVISED RECORDS.--WSP 306: 1910. WSP 1310: 1887-91, 1893, 1896, 1900, 1904, 1915(M), 1922(M), 1936(M). WSP 1730: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 6,078.43 ft above sea level. See WSP 1710 or 1730 for history of changes prior to Mar. 14, 1910.

REMARKS.--Records good except for estimated daily discharges, which are fair. Natural flow of stream affected by transmountain diversions through Boreas Pass ditch, Homestake Pipeline, Harold D. Roberts tunnel, and Antero and Elevenmile Canyon Reservoirs, Cheesman Lake, diversions above station for irrigation of about 45,000 acres, and return flow from irrigated areas.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	674	276	293	e261	e256	e167	257	588	748	617	697	318
2	656	236	309	e228	e249	e172	260	572	661	591	697	343
3	571	233	312	e262	e249	e194	258	488	573	663	697	414
4	452	233	280	e265	e243	e222	267	503	579	671	674	419
5	450	240	277	e257	e216	e216	263	588	537	710	651	444
6	450	296	268	e264	e212	e225	273	600	523	691	542	452
7	445	333	e224	e250	e226	e222	407	637	504	498	605	452
8	445	354	e215	e264	e223	e197	406	639	502	566	592	439
9	442	333	e236	e274	e197	e211	406	637	536	607	531	405
10	441	297	e234	e269	e208	e216	398	639	540	662	523	392
11	428	290	e239	e253	e228	213	400	639	538	730	515	330
12	352	338	e220	e243	e217	216	396	642	538	719	516	269
13	350	351	e204	e229	e211	221	395	578	579	714	519	285
14	352	347	e237	e209	e225	227	439	536	593	713	520	218
15	356	342	e242	e224	e213	220	505	558	632	711	527	199
16	362	342	e219	e233	e216	213	541	658	631	707	566	198
17	440	325	e229	e217	e232	209	524	685	624	695	554	273
18	482	329	e234	e199	e231	208	427	541	618	696	506	401
19	448	323	e216	e214	e219	212	407	537	631	696	503	428
20	403	282	e228	e224	e201	212	406	542	627	693	506	401
21	403	283	e238	e234	e195	214	388	630	635	700	512	256
22	374	299	e214	e228	e203	213	340	624	630	720	447	213
23	394	313	e212	e193	e208	223	407	620	624	669	339	207
24	392	311	e199	e206	e211	225	548	652	630	407	336	221
25	380	313	e208	e258	e190	223	602	617	681	548	379	234
26	368	319	e220	e305	e181	219	600	566	688	672	422	320
27	347	314	e215	e295	e183	201	531	525	717	674	503	321
28	347	300	e238	e290	e210	214	524	532	716	672	570	320
29	347	302	e267	e270	---	227	524	622	672	672	491	319
30	339	307	e245	e239	---	247	537	671	649	660	397	335
31	286	---	e258	e208	---	251	---	687	---	642	374	---
TOTAL	12976	9161	7430	7565	6053	6650	12636	18553	18356	20386	16211	9826
MEAN	419	305	240	244	216	215	421	598	612	658	523	328
MAX	674	354	312	305	256	251	602	687	748	730	697	452
MIN	286	233	199	193	181	167	257	488	502	407	336	198
AC-FT	25740	18170	14740	15010	12010	13190	25060	36800	36410	40440	32150	19490

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1896 - 2002, BY WATER YEAR (WY)

	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	250	170	122	114	112	134	335	733	874	686	592	352																																																																																															
MAX	664	407	255	244	239	476	1955	2979	3047	1855	1694	1900																																																																																															
(WY)	1910	1924	1924	2002	1976	1910	1942	1942	1921	1914	1914	1909																																																																																															
MIN	61.5	49.3	45.2	45.6	36.5	52.1	98.2	180	127	85.3	81.0	81.6																																																																																															
(WY)	1903	1905	1940	1940	1933	1957	1912	1902	1902	1902	1902	1902																																																																																															

SUMMARY STATISTICS

FOR 2002 WATER YEAR

(a) WATER YEARS 1896 - 2002

ANNUAL TOTAL	145803	
ANNUAL MEAN	399	373
HIGHEST ANNUAL MEAN		899
LOWEST ANNUAL MEAN		119
HIGHEST DAILY MEAN	748	6140
LOWEST DAILY MEAN	e167	b10
ANNUAL SEVEN-DAY MINIMUM	e185	28
MAXIMUM PEAK FLOW	870	c6320
MAXIMUM PEAK STAGE	3.77	8.95
ANNUAL RUNOFF (AC-FT)	289200	270500
10 PERCENT EXCEEDS	661	816
50 PERCENT EXCEEDS	350	220
90 PERCENT EXCEEDS	213	80

e Estimated.

a Water year 1983 to 2001 data were published by Colorado Division of Water Resources.

b Minimum daily determined.

c From rating curve extended above 3500 ft³/s. Flood of Jul 12, 1996 may have been higher; peak data being reviewed.

06708800 EAST PLUM CREEK BELOW HASKINS GULCH NEAR CASTLE ROCK, CO

LOCATION.--Lat 39°25'28", long 104°54'27", in SE¹/₄SE¹/₄ sec.20, T.7 S., R.67 W., Douglas County, Hydrologic Unit 10190002, on right bank at the Plum Creek Wastewater Treatment Plant, 0.1 mi southeast of Happy Canyon Road, 3.0 mi east of Sedalia, and 3.6 mi northwest of Castle Rock.

DRAINAGE AREA.--117 mi².

PERIOD OF RECORD.--April 1999 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,940 ft above sea level, from topographic map.

REMARKS.--Records poor. Diversions upstream from station for irrigation. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1.7	2.9	e5.3	6.1	e5.7	e4.0	2.6	3.3	1.3	0.67	1.0	3.2
2	e1.5	2.5	6.0	e5.2	e9.1	e4.8	2.7	3.5	1.1	0.69	0.72	2.8
3	e2.4	2.4	7.1	e6.3	e8.0	e5.8	2.7	3.4	e1.4	8.9	0.85	2.4
4	e1.6	2.4	5.3	6.2	e7.8	e8.5	2.7	3.2	18	4.1	0.86	0.90
5	e2.8	2.5	4.6	e5.1	e7.3	5.8	2.6	3.1	6.5	e0.96	0.78	0.72
6	e4.3	2.7	4.0	5.0	e5.2	5.0	2.8	3.0	e4.3	e17	1.3	0.57
7	e3.4	2.9	5.9	4.6	e3.3	6.7	3.1	3.2	e3.2	e3.4	1.8	0.64
8	e2.5	3.2	e6.1	4.2	6.0	6.4	3.2	3.3	3.0	e2.9	1.4	0.60
9	e1.1	2.9	e5.0	4.4	3.7	4.7	3.0	3.2	e3.4	e2.1	1.3	1.1
10	e2.3	2.8	5.1	4.8	e4.5	4.9	3.2	3.3	3.2	e3.3	1.2	3.6
11	e1.7	2.9	e3.9	4.2	4.9	4.8	4.9	3.4	2.9	e3.8	0.89	1.8
12	e0.94	3.0	e4.4	4.7	7.2	3.6	3.9	4.6	e2.5	e3.2	0.95	35
13	e1.0	3.0	e3.5	4.3	6.8	2.6	4.0	4.3	e2.4	e3.1	1.1	22
14	e1.0	3.1	4.3	e4.3	6.4	4.4	3.6	4.1	2.8	e3.3	0.83	7.4
15	e1.6	3.2	5.0	e4.3	6.5	4.1	3.2	4.0	3.0	e2.2	0.75	2.8
16	e0.80	3.1	6.2	4.8	5.5	5.1	3.2	5.3	2.9	1.6	0.59	2.0
17	e1.7	3.0	5.1	e3.4	6.0	4.1	3.4	5.7	3.8	1.5	0.44	1.5
18	e1.6	3.3	5.1	e1.7	6.6	4.4	3.3	3.9	e2.7	1.4	0.43	5.4
19	e1.8	3.6	5.0	e1.3	8.2	4.4	3.3	3.4	43	1.2	0.96	5.6
20	e1.9	3.3	5.4	e2.5	7.8	4.8	3.6	3.2	22	1.1	1.2	2.0
21	e2.6	3.5	4.6	3.3	6.9	4.3	3.3	3.2	2.8	1.3	1.6	1.5
22	e2.7	3.2	e6.6	3.1	5.7	4.4	3.1	2.9	0.71	3.3	3.3	1.3
23	e2.0	11	e5.2	e3.2	6.7	4.4	3.0	3.0	0.33	2.7	5.3	1.3
24	2.1	7.0	e7.0	e1.9	7.0	4.2	2.9	11	0.79	2.4	4.9	1.1
25	2.1	5.1	e8.2	e5.3	e5.3	3.8	2.8	5.2	0.63	2.1	4.4	1.1
26	2.0	5.5	8.8	5.1	e5.0	3.6	3.1	3.8	0.58	2.0	3.7	1.3
27	2.1	4.6	9.3	5.2	e5.9	4.2	3.1	e2.4	0.45	1.9	17	1.1
28	2.1	e5.1	e7.3	5.3	7.0	2.9	2.9	e0.69	0.96	1.9	8.2	1.1
29	2.3	4.7	5.7	e5.4	---	2.6	2.9	e0.56	1.6	1.6	5.4	1.1
30	2.5	5.4	5.1	5.7	---	2.9	2.9	1.8	0.83	1.4	4.0	1.1
31	3.4	---	e5.8	e5.2	---	2.8	---	1.6	---	1.1	3.5	---
TOTAL	63.54	113.8	175.9	136.1	176.0	139.0	95.0	110.55	143.08	88.12	80.65	114.03
MEAN	2.05	3.79	5.67	4.39	6.29	4.48	3.17	3.57	4.77	2.84	2.60	3.80
MAX	4.3	11	9.3	6.3	9.1	8.5	4.9	11	43	17	17	35
MIN	0.80	2.4	3.5	1.3	3.3	2.6	2.6	0.56	0.33	0.67	0.43	0.57
AC-FT	126	226	349	270	349	276	188	219	284	175	160	226

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)

	1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002
MEAN	6.84	7.15	6.94	7.08	7.58	8.79	17.8	40.2	21.1	7.87	9.55	7.33
MAX	11.0	11.5	10.6	10.0	9.04	15.0	31.4	109	61.2	21.6	29.0	14.6
(WY)	2000	2000	2000	2000	2000	2000	2000	1999	1999	1999	1999	1999
MIN	2.05	3.79	4.50	4.39	6.29	4.48	3.17	3.57	4.77	2.51	1.46	3.80
(WY)	2002	2002	2001	2002	2002	2002	2002	2002	2002	2001	2001	2002

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1999 - 2002

ANNUAL TOTAL	2784.70	1435.77	
ANNUAL MEAN	7.63	3.93	8.18
HIGHEST ANNUAL MEAN			12.4
LOWEST ANNUAL MEAN			3.93
HIGHEST DAILY MEAN	68	May 5	410
LOWEST DAILY MEAN	0.56	Sep 6	0.33
ANNUAL SEVEN-DAY MINIMUM	0.84	Aug 31	0.64
MAXIMUM PEAK FLOW			a901
MAXIMUM PEAK STAGE			7.75
ANNUAL RUNOFF (AC-FT)	5520	2850	5930
10 PERCENT EXCEEDS	20	6.5	19
50 PERCENT EXCEEDS	5.3	3.2	5.8
90 PERCENT EXCEEDS	1.4	1.1	1.5

e Estimated.

a From rating curve extended above 359 ft³/s.

06709530 PLUM CREEK AT TITAN ROAD NEAR LOUVIERS, CO

LOCATION.--Lat 39°30'27", long 105°01'26", on line between sec.20 and sec.29, T.6 S., R.68 W., Douglas County, Hydrologic Unit 10190002, on left bank, on downstream side of bridge on Titan Road, 2.4 mi north of Louviers.

DRAINAGE AREA.--315 mi².

PERIOD OF RECORD.--May 1984 to current year.

REVISED RECORDS.--WDR CO-86-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,520 ft above sea level, from topographic map. Prior to July 10, 1996, at same site, but different datum.

REMARKS.--Records poor. Diversions upstream from station for irrigation. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	10	e12	e13	10	e11	8.0	3.8	0.00	0.00	0.00	0.00
2	0.00	11	e13	e12	15	e11	5.6	4.8	0.00	0.00	0.00	0.00
3	0.00	11	e14	12	14	e16	12	5.9	0.09	0.00	0.00	0.00
4	0.00	13	e12	e13	15	e23	12	5.4	17	0.00	0.00	0.00
5	0.00	9.7	7.0	e13	14	e21	12	5.8	13	0.00	0.00	0.00
6	0.00	8.4	8.4	e14	15	17	11	5.6	8.1	11	0.00	0.00
7	0.00	7.9	8.3	e14	16	17	12	5.4	5.8	7.7	0.00	0.00
8	0.00	11	8.3	e12	16	17	13	4.7	4.5	2.6	0.00	0.00
9	0.00	8.4	11	11	16	e16	10	2.8	1.3	e0.65	0.00	0.00
10	0.00	7.5	9.6	15	11	16	8.1	3.5	e1.0	0.00	0.00	0.00
11	0.00	6.9	6.5	18	16	16	12	2.2	e0.80	0.65	0.00	0.00
12	0.00	7.8	5.8	18	14	19	8.4	5.5	e0.50	1.8	0.00	0.00
13	0.00	6.8	2.0	13	13	18	12	7.5	e0.30	0.00	0.00	e4.0
14	0.00	7.8	7.4	13	11	14	13	5.5	0.00	0.00	0.00	e14
15	0.00	13	8.3	13	9.1	20	12	7.1	0.00	0.00	0.00	0.00
16	e0.20	12	8.8	12	11	20	11	5.4	0.00	0.00	0.00	0.00
17	e0.60	7.9	e14	9.3	11	18	10	13	0.00	0.00	0.00	0.00
18	e0.90	9.3	12	6.8	12	14	9.5	13	0.00	0.00	0.00	0.00
19	1.1	18	12	4.9	18	13	7.7	13	0.00	0.00	0.00	0.00
20	3.8	19	11	5.9	17	15	7.9	15	33	0.00	0.00	e2.5
21	6.0	15	e12	6.3	17	13	8.6	14	13	0.00	0.00	0.00
22	7.0	16	e12	7.0	14	12	7.0	11	7.7	0.00	0.00	0.00
23	5.9	27	e11	5.7	14	11	5.7	11	4.7	0.00	0.00	0.00
24	3.0	23	e11	3.6	14	9.3	5.5	17	e1.0	0.00	0.00	0.00
25	4.0	23	e12	10	13	12	5.6	17	e0.60	0.00	0.00	0.00
26	4.3	17	e13	12	e15	12	5.8	15	0.00	0.00	0.00	0.00
27	4.8	18	e13	8.7	e18	11	5.7	14	0.00	0.00	0.00	0.00
28	8.3	e12	e13	10	e19	10	4.1	9.7	0.00	0.00	0.00	0.00
29	8.5	e13	e13	11	---	9.2	3.7	5.1	0.00	0.00	0.00	0.00
30	8.9	e14	e13	11	---	10	3.9	3.2	0.00	0.00	0.00	0.00
31	10	---	12	10	---	10	---	0.78	---	0.00	0.00	---
TOTAL	77.30	384.4	326.4	338.2	398.1	451.5	262.8	252.68	112.39	24.40	0.00	20.50
MEAN	2.49	12.8	10.5	10.9	14.2	14.6	8.76	8.15	3.75	0.79	0.000	0.68
MAX	10	27	14	18	19	23	13	17	33	11	0.00	14
MIN	0.00	6.8	2.0	3.6	9.1	9.2	3.7	0.78	0.00	0.00	0.00	0.00
AC-FT	153	762	647	671	790	896	521	501	223	48	0.00	41

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2002, BY WATER YEAR (WY)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	11.9	17.0	14.6	14.0	16.6	25.7	68.8	159	47.0	15.6	15.6	6.05							
MAX	71.8	75.9	44.3	32.1	42.7	62.1	184	779	135	66.5	63.4	31.1							
(WY)	1985	1985	1985	1998	1988	1988	1998	1984	1984	1995	1984	1984							
MIN	0.000	2.15	4.40	4.86	5.14	6.55	8.76	8.15	3.75	0.002	0.000	0.000							
(WY)	1995	1995	1996	1991	1990	1995	2002	2002	2002	1993	1993	1990							

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1984 - 2002

ANNUAL TOTAL	6366.15	2648.67	
ANNUAL MEAN	17.4	7.26	30.7
HIGHEST ANNUAL MEAN			73.6
LOWEST ANNUAL MEAN			7.26
HIGHEST DAILY MEAN	137	May 15	33
LOWEST DAILY MEAN	0.00	Aug 6	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 6	0.00
MAXIMUM PEAK FLOW			107
MAXIMUM PEAK STAGE			8.04
ANNUAL RUNOFF (AC-FT)	12630	5250	22220
10 PERCENT EXCEEDS	52	16	65
50 PERCENT EXCEEDS	10	7.5	13
90 PERCENT EXCEEDS	0.00	0.00	0.00

e Estimated.

a No flow many days, most years.

b From rating curve extended above 450 ft³/s.

c Maximum gage height, 10.63 ft, Jun 28, 1995, datum then in use.

06710247 SOUTH PLATTE RIVER BELOW UNION AVENUE, AT ENGLEWOOD, CO

LOCATION.--Lat 39°37'57", long 105°00'52", in SW $\frac{1}{4}$ /NW $\frac{1}{4}$ sec.9, T.5 S., R.68 W., Arapahoe County, Hydrologic Unit 10190002, on right bank 100 ft downstream from Englewood Water Treatment Plant, 200 ft downstream from Union Avenue bridge in Englewood, and 7.7 mi downstream from Chatfield Dam.

DRAINAGE AREA.--3,043 mi².

PERIOD OF RECORD.--February 1996 to current year.

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Elevation of gage is 5,290 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. Flow regulated by Chatfield Reservoir (station 06709600) 7.7 mi upstream. Diversions for municipal use by City of Englewood 100 ft upstream from gage. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	17	11	11	20	61	34	18	60	13	6.0	7.9
2	20	9.0	13	9.5	20	79	31	27	56	13	7.6	6.9
3	16	9.5	16	11	22	84	34	25	29	21	6.7	7.8
4	17	9.6	15	11	22	87	25	21	119	15	18	8.4
5	24	9.6	13	13	15	51	40	17	49	31	15	9.8
6	22	9.2	18	14	14	63	44	17	43	154	11	9.0
7	21	12	14	14	14	65	43	19	105	36	9.6	8.0
8	20	37	13	12	12	66	46	24	123	19	8.9	7.9
9	23	14	15	14	10	69	55	27	134	13	7.5	8.9
10	24	13	18	27	12	67	46	27	123	38	7.8	40
11	20	12	14	27	10	63	25	24	120	43	7.3	15
12	17	11	17	26	10	62	23	41	109	27	6.8	52
13	23	12	12	24	11	60	16	24	108	26	6.4	43
14	21	12	14	24	8.0	71	11	23	104	14	6.3	22
15	24	11	15	23	13	83	14	29	105	10	6.0	15
16	20	8.6	24	23	33	79	11	32	112	13	6.4	14
17	20	9.4	21	19	37	77	13	43	116	13	5.2	12
18	17	14	18	17	41	71	17	32	114	10	6.2	71
19	21	17	14	18	46	65	20	30	105	14	7.1	61
20	19	12	15	18	48	56	21	29	44	8.8	7.7	20
21	18	10	17	19	57	52	19	26	27	10	9.8	17
22	20	12	16	18	58	56	9.7	19	45	8.7	12	19
23	21	54	16	20	61	54	8.0	25	28	9.0	15	21
24	17	17	12	19	60	52	9.5	169	25	9.8	11	14
25	15	13	14	24	59	52	13	104	24	9.3	11	11
26	17	24	14	28	61	51	16	119	21	11	7.8	13
27	19	14	14	26	57	41	20	109	17	23	17	15
28	19	9.6	15	24	55	40	18	81	19	25	42	14
29	21	11	12	20	---	32	8.9	72	20	23	24	14
30	24	11	14	20	---	29	11	72	13	18	14	12
31	22	---	12	20	---	29	---	70	---	15	9.0	---
TOTAL	623	434.5	466	593.5	886.0	1867	702.1	1395	2117	693.6	336.1	589.6
MEAN	20.10	14.48	15.03	19.15	31.64	60.23	23.40	45.00	70.57	22.37	10.84	19.65
MAX	24	54	24	28	61	87	55	169	134	154	42	71
MIN	15	8.6	11	9.5	8.0	29	8.0	17	13	8.7	5.2	6.9
AC-FT	1240	862	924	1180	1760	3700	1390	2770	4200	1380	667	1170

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2002, BY WATER YEAR (WY)

	1996	1997	1998	1999	2000	2001	2002
MEAN	55.96	48.89	39.32	42.23	50.65	63.87	146.3
MAX	111	83.5	76.4	73.6	81.7	112	403
(WY)	1999	1998	1998	1998	2001	1998	1998
MIN	20.1	14.5	14.7	12.7	20.0	27.1	23.4
(WY)	2002	2002	1999	1997	1999	1996	2002

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1996 - 2002
ANNUAL TOTAL	32194.5	10703.4	
ANNUAL MEAN	88.20	29.32	158.2
HIGHEST ANNUAL MEAN			293
LOWEST ANNUAL MEAN			29.3
HIGHEST DAILY MEAN	524	May 5	1940
LOWEST DAILY MEAN	8.6	Nov 16	3.3
ANNUAL SEVEN-DAY MINIMUM	11	Nov 1	6.2
MAXIMUM PEAK FLOW		491	Jul 6
MAXIMUM PEAK STAGE		12.56	Jul 6
ANNUAL RUNOFF (AC-FT)	63860	21230	114600
10 PERCENT EXCEEDS	210	65	421
50 PERCENT EXCEEDS	65	19	66
90 PERCENT EXCEEDS	14	9.4	14

06710385 BEAR CREEK ABOVE EVERGREEN, CO

LOCATION.--Lat 39°37'58", long 105°20'10", in SE¼NE¼ sec.9, T.5 S., R.71 W., Jefferson County, Hydrologic Unit 10190002, on right bank 0.9 mi upstream from Evergreen Lake dam at Evergreen.

DRAINAGE AREA.--104 mi².

PERIOD OF RECORD.--August 1984 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage 7,080 ft above sea level, from topographic map. Prior to May 1, 1986, at site 800 ft downstream at different datum. May 1, 1986 to Apr. 2, 2001, at site 600 ft downstream at different datum.

REMARKS.--Records poor. Natural flow of stream affected by small diversions for irrigation. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	17	e10	e9.7	e8.5	e9.0	e14	13	13	4.4	3.9	7.5
2	21	17	e10	e9.7	e8.5	e8.9	e16	13	11	4.6	4.2	6.2
3	21	18	e10	e9.7	e8.5	e8.9	e15	12	11	4.4	4.8	5.4
4	20	17	e10	e9.7	e8.6	e9.0	e15	11	16	5.6	12	5.2
5	20	17	e10	e9.6	e8.5	e9.1	e15	11	21	5.3	14	4.7
6	21	17	e10	e9.5	e8.6	e9.1	e15	11	18	7.2	21	4.4
7	21	17	e10	e9.5	e8.6	e9.2	e15	11	16	16	15	3.8
8	20	18	e10	e9.5	e8.6	e9.2	e15	11	14	11	13	2.6
9	20	16	e10	e9.6	e8.6	e9.2	14	9.8	13	8.8	11	4.0
10	17	18	e10	e9.6	e8.5	e9.2	14	8.6	11	7.5	9.9	20
11	16	17	e10	e9.4	e8.6	e9.4	15	8.7	11	8.6	8.8	15
12	17	16	e10	e9.5	e8.6	e9.6	15	12	10	7.3	7.5	15
13	16	18	e10	e9.5	e8.5	e9.7	15	11	10	4.7	7.4	17
14	16	e17	e10	e9.3	e8.5	e9.8	16	14	10	4.1	7.7	14
15	18	e17	e10	e9.3	e8.5	e9.7	17	12	10	4.0	6.4	12
16	17	e16	e10	e9.2	e8.6	e9.8	16	11	10	4.1	5.4	11
17	17	e16	e10	e9.2	e8.7	e10	14	12	9.8	3.6	4.7	9.5
18	17	e15	e10	e9.1	e8.7	e10	14	11	10	3.2	4.6	8.1
19	16	e15	e10	e9.1	e8.8	e10	14	9.7	9.9	2.9	4.6	13
20	17	e14	e10	e9.1	e8.8	e11	13	8.3	10	2.8	5.0	12
21	17	e14	e9.9	e8.9	e8.8	e11	11	12	9.1	2.8	5.5	11
22	17	e13	e9.8	e9.0	e8.8	e11	12	9.7	9.1	4.0	6.6	9.9
23	17	e13	e9.7	e9.0	e8.8	e12	12	6.6	8.8	6.0	6.9	9.6
24	17	e12	e9.9	e8.9	e8.9	e12	12	13	8.0	6.3	6.5	9.6
25	17	e12	e9.9	e8.9	e8.9	e11	12	15	7.3	4.0	6.5	9.1
26	19	e11	e9.9	e8.9	e8.9	e11	12	21	6.9	3.5	5.6	9.5
27	19	e10	e10	e8.9	e8.8	e12	13	18	7.3	4.7	5.1	11
28	18	e10	e9.8	e8.9	e8.9	e13	12	18	8.0	4.0	10	10
29	18	e10	e9.8	e8.7	---	e13	11	16	7.3	4.1	11	10
30	18	e10	e9.7	e8.6	---	e13	12	15	5.0	3.7	11	9.8
31	18	---	e9.7	e8.5	---	e13	---	14	---	3.7	9.8	---
TOTAL	564	448	308.1	286.0	242.6	321.8	416	379.4	321.5	166.9	255.4	289.9
MEAN	18.19	14.93	9.939	9.226	8.664	10.38	13.87	12.24	10.72	5.384	8.239	9.663
MAX	21	18	10	9.7	8.9	13	17	21	21	16	21	20
MIN	16	10	9.7	8.5	8.5	8.9	11	6.6	5.0	2.8	3.9	2.6
AC-FT	1120	889	611	567	481	638	825	753	638	331	507	575

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2002, BY WATER YEAR (WY)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	28.36	22.92	16.10	13.47	12.65	15.91	35.11	94.12	99.24	57.99	51.13	33.14						
MAX	85.1	56.2	32.8	19.6	18.2	26.7	89.7	238	280	134	129	54.2						
(WY)	1985	1985	1985	1988	1996	1992	1987	1998	1995	1995	1999	1997						
MIN	16.0	9.65	8.67	7.28	8.66	9.57	13.9	12.2	10.7	5.38	8.24	9.66						
(WY)	1995	1993	1995	2001	2002	1995	1991	2002	2002	2002	2002	2002						

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1985 - 2002

ANNUAL TOTAL	9432.0	3999.6	
ANNUAL MEAN	25.84	10.96	40.14
HIGHEST ANNUAL MEAN			70.5
LOWEST ANNUAL MEAN			11.0
HIGHEST DAILY MEAN	109	Jul 14	421
LOWEST DAILY MEAN	e6.8	Jan 18	2.6
ANNUAL SEVEN-DAY MINIMUM	e6.8	Jan 17	3.3
MAXIMUM PEAK FLOW			71
MAXIMUM PEAK STAGE			5.36
ANNUAL RUNOFF (AC-FT)	18710	7930	29080
10 PERCENT EXCEEDS	49	17	88
50 PERCENT EXCEEDS	18	10	24
90 PERCENT EXCEEDS	8.5	5.4	11

e Estimated.

a Maximum gage height, 5.96 ft, Jul 13, 2001, present site and datum.

06710500 BEAR CREEK AT MORRISON, CO

LOCATION.--Lat 39°39'11", long 105°11'43", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.35, T.4 S., R.70 W., Jefferson County, Hydrologic Unit 10190002, on left bank at Morrison, 180 ft upstream from bridge on State Highway 8, and 0.2 mi upstream from Mount Vernon Creek.

DRAINAGE AREA.--164 mi².

PERIOD OF RECORD.--September 1887 to September 1891, May 1895 to December 1901, February 1902 (gage heights only), October 1919 to current year. No winter records for water years 1888-90, 1896, 1898, 1900. Monthly discharge only for some periods, published in WSP 1310. Published as "near Morrison" 1900-1902, as "at Starbuck" 1919-28, and as "at Idledale" 1929-34. Water-quality data available, October 1976 to September 1981.

REVISED RECORDS.--WSP 976: 1942. WSP 1310: 1888, 1890-91, 1898, 1935(M). WSP 1730: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Datum of gage is 5,780.43 ft above sea level. See WSP 1710 or 1730 for history of changes prior to Oct. 1, 1934. Oct. 1, 1934 to Oct. 10, 1961, water-stage recorder at site 80 ft downstream at present datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Small diversions for irrigation of about 1,000 acres upstream from station.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	18	e13	e12	e11	e10	17	12	16	3.9	1.0	e4.3
2	22	18	e13	e12	e11	e10	17	13	13	3.4	0.94	e3.0
3	21	19	e13	e12	e11	e10	12	13	13	2.1	1.5	e2.0
4	20	18	e13	e12	e11	e10	15	11	17	2.1	2.4	e2.0
5	22	17	e13	e12	e11	e11	16	11	33	2.6	5.8	e2.0
6	22	17	e13	e12	e11	12	17	10	25	4.8	10	e2.0
7	23	18	e13	e12	e11	12	16	11	21	10	13	e1.0
8	21	21	e13	e12	e11	e11	16	11	15	12	7.2	e1.0
9	22	19	e13	e12	e11	e12	15	11	12	7.9	6.5	e1.0
10	22	14	e13	e12	e11	12	16	10	11	6.3	5.1	e10
11	21	15	e13	e12	e11	12	17	11	10	4.8	4.1	e31
12	22	23	e13	e12	e11	12	17	15	10	4.6	3.9	e23
13	23	20	e13	e12	e11	13	16	16	9.0	3.8	3.7	e36
14	20	20	e13	e12	e11	14	16	14	9.1	2.6	3.2	21
15	21	17	e13	e12	e11	14	18	16	8.9	1.5	3.1	14
16	23	18	e12	e11	e10	13	19	14	8.7	1.4	3.0	11
17	22	17	e12	e11	e10	12	15	16	8.2	1.3	2.3	9.2
18	21	18	e12	e11	e10	13	13	15	7.0	1.2	2.3	8.5
19	20	18	e12	e11	e10	13	14	15	6.0	0.95	2.7	e25
20	20	14	e12	e11	e10	12	14	13	5.8	0.62	2.0	15
21	20	15	e12	e11	e10	13	13	14	6.5	0.97	1.8	15
22	20	e15	e12	e11	e10	14	12	15	7.9	1.5	2.9	12
23	23	e15	e12	e11	e10	15	11	12	8.2	0.88	3.5	11
24	19	e14	e12	e11	e10	14	11	23	7.2	2.0	3.2	10
25	16	e13	e12	e11	e10	13	11	25	5.2	2.8	3.3	10
26	18	e13	e12	e11	e10	12	11	31	4.8	2.2	3.3	11
27	19	e13	e12	e11	e10	13	12	29	4.9	1.9	e3.0	12
28	21	e13	e12	e11	e10	15	12	26	4.1	1.1	e3.0	12
29	20	e13	e12	e11	---	15	11	23	4.1	0.74	e3.0	12
30	20	e13	e12	e11	---	15	10	18	3.9	0.96	e6.0	11
31	22	---	e12	e11	---	16	---	16	---	1.0	e6.0	---
TOTAL	649	496	387	356	295	393	430	490	315.5	93.92	122.74	338.0
MEAN	20.9	16.5	12.5	11.5	10.5	12.7	14.3	15.8	10.5	3.03	3.96	11.3
MAX	23	23	13	12	11	16	19	31	33	12	13	36
MIN	16	13	12	11	10	10	10	10	3.9	0.62	0.94	1.0
AC-FT	1290	984	768	706	585	780	853	972	626	186	243	670

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1900 - 2002, BY WATER YEAR (WY)

	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	31.0	23.6	17.0	13.9	14.4	20.2	53.1	146	135	71.4	63.8	43.2																																																																																											
MAX	115	86.7	57.0	34.0	36.0	48.3	296	525	551	249	307	371																																																																																											
(WY)	1985	1924	1924	1924	1924	1960	1942	1973	1949	1949	1923	1938																																																																																											
MIN	9.52	9.59	7.31	5.19	4.00	4.00	13.1	12.4	10.5	3.03	3.96	5.41																																																																																											
(WY)	1935	1957	1940	1950	1933	1933	1982	1963	2002	2002	2002	1978																																																																																											

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1900 - 2002
ANNUAL TOTAL	10620	4366.16	
ANNUAL MEAN	29.1	12.0	52.3
HIGHEST ANNUAL MEAN			125 1942
LOWEST ANNUAL MEAN			12.0 2002
HIGHEST DAILY MEAN	99	Jul 14	1410 May 7 1969
LOWEST DAILY MEAN	e10	Jan 26	0.62 Jul 20 2002
ANNUAL SEVEN-DAY MINIMUM	e10	Jan 26	1.0 Jul 28 2002
MAXIMUM PEAK FLOW		e50	Sep 13 e8600 Jul 24 1896
MAXIMUM PEAK STAGE		6.22	Sep 13
ANNUAL RUNOFF (AC-FT)	21060	8660	37920
10 PERCENT EXCEEDS	57	20	117
50 PERCENT EXCEEDS	22	12	25
90 PERCENT EXCEEDS	12	2.8	11

e Estimated.

06710605 BEAR CREEK ABOVE BEAR CREEK LAKE NEAR MORRISON, CO

LOCATION.--Lat 39°39'08", long 105°10'23", in NW¹/₄NE¹/₄ sec.1, T.5 S. R.70 W., Jefferson County, Hydrologic Unit 10190002, on right bank, 0.9 mi downstream from Strain Gulch, 1.0 mi east of Morrison, and 1.1 mi downstream from Mt. Vernon Creek.

DRAINAGE AREA.--176 mi².

PERIOD OF RECORD.--May 1986 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage 5,645 ft above sea level, from topographic map. Prior to Apr. 21, 1989, at datum 3.37 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by diversions to Harriman Canal, and Ward Canal, 0.7 mi upstream from gage. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	13	e5.6	e6.5	e9.7	2.1	8.9	3.0	1.6	0.53	1.0	0.15
2	7.4	13	e5.7	e6.6	e9.8	2.4	5.1	3.6	1.2	0.81	0.92	0.08
3	4.2	14	e5.7	e6.7	e9.9	2.6	1.8	3.8	0.55	0.83	1.4	0.07
4	3.4	14	e5.6	e6.8	e10	2.7	2.0	3.1	3.8	0.85	1.5	0.82
5	3.3	13	e5.6	e6.9	e10	2.4	2.9	2.6	15	0.80	6.2	0.54
6	3.0	13	e5.6	e7.0	e10	1.7	8.1	2.1	5.3	0.89	15	0.37
7	3.4	14	e5.6	e7.0	e10	1.5	7.6	2.4	2.7	4.4	13	0.61
8	8.9	e15	e5.7	e7.1	e10	1.5	6.0	2.3	0.71	4.4	1.00	1.3
9	13	e13	e5.7	e7.2	e10	1.5	4.5	1.8	0.54	0.27	1.9	1.7
10	13	11	e5.7	e7.2	e10	1.5	5.3	1.6	0.42	0.30	2.4	10
11	12	12	e5.7	e7.2	e11	1.5	7.0	1.5	0.68	0.46	1.7	7.5
12	13	e11	e5.7	e7.2	e11	1.7	6.9	4.7	1.3	0.83	1.2	3.9
13	14	e13	e5.7	e7.3	e10	1.5	5.6	4.1	0.95	0.93	1.6	6.8
14	12	e14	e5.7	e7.3	e8.6	1.7	5.8	1.5	0.81	0.88	1.5	2.2
15	13	e13	e5.7	e7.4	e7.5	3.1	7.7	3.2	0.78	0.77	1.3	0.32
16	14	e13	e5.8	e7.4	e5.2	4.3	8.1	1.3	0.80	0.87	1.2	0.20
17	13	e12	e5.8	e7.6	e4.5	4.0	4.5	2.6	0.82	0.85	0.96	0.13
18	13	e12	e5.8	e7.6	e4.0	1.7	3.2	2.2	0.39	0.80	0.91	0.47
19	12	e11	e5.9	e7.7	e3.5	7.3	4.0	2.8	0.35	1.1	1.5	4.2
20	12	11	e5.9	e7.9	2.7	8.5	5.8	0.89	0.43	0.94	0.74	0.78
21	13	e9.0	e5.9	e7.9	2.3	9.1	5.1	1.4	0.71	1.1	0.73	0.90
22	13	e8.5	e5.9	e8.1	2.2	8.3	3.4	3.7	2.1	3.7	1.8	0.22
23	17	e7.9	e6.0	e8.1	2.2	e11	2.2	0.28	1.1	1.2	1.8	0.19
24	13	e7.4	e6.1	e8.3	2.2	e11	1.9	7.3	0.38	1.3	0.34	0.25
25	12	e6.8	e6.2	e8.5	2.0	e10	2.8	3.6	0.26	1.1	0.59	0.88
26	14	e6.2	e6.2	e8.5	2.1	5.2	3.3	1.3	0.30	1.1	0.51	1.3
27	15	e6.0	e6.2	e8.7	2.2	9.0	3.4	0.74	0.30	1.1	0.47	1.4
28	16	e5.8	e6.3	e8.9	2.2	12	3.8	1.3	0.33	1.3	0.89	2.1
29	15	e5.7	e6.4	e9.1	---	12	2.9	0.78	0.34	0.96	2.6	2.0
30	16	e5.6	e6.4	e9.4	---	14	2.6	0.75	0.32	0.98	3.4	1.4
31	17	---	e6.4	e9.6	---	13	---	2.2	---	1.1	0.29	---
TOTAL	354.2	323.9	182.2	238.7	184.8	169.8	142.2	74.44	45.27	37.45	70.35	52.78
MEAN	11.4	10.8	5.88	7.70	6.60	5.48	4.74	2.40	1.51	1.21	2.27	1.76
MAX	17	15	6.4	9.6	11	14	8.9	7.3	15	4.4	15	10
MIN	3.0	5.6	5.6	6.5	2.0	1.5	1.8	0.28	0.26	0.27	0.29	0.07
AC-FT	703	642	361	473	367	337	282	148	90	74	140	105

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2002, BY WATER YEAR (WY)

MEAN	16.5	16.6	17.6	16.2	15.4	17.9	47.4	122	107	43.1	35.6	19.7
MAX	38.8	44.9	33.8	32.3	25.1	47.0	191	382	512	216	127	58.7
(WY)	1998	1998	1998	1998	1998	1998	1998	1998	1995	1995	1999	1997
MIN	4.34	0.38	5.88	1.69	0.23	1.26	2.83	2.40	1.51	1.21	2.27	1.76
(WY)	1990	1990	2002	1995	1995	1995	1989	2002	2002	2002	2002	2002

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1986 - 2002

ANNUAL TOTAL	6647.6	1876.09	
ANNUAL MEAN	18.2	5.14	40.2
HIGHEST ANNUAL MEAN			96.1
LOWEST ANNUAL MEAN			5.14
HIGHEST DAILY MEAN	101	Jul 14	684
LOWEST DAILY MEAN	2.0	Mar 18	0.07
ANNUAL SEVEN-DAY MINIMUM	3.7	Mar 13	0.32
MAXIMUM PEAK FLOW			42
MAXIMUM PEAK STAGE			4.34
ANNUAL RUNOFF (AC-FT)	13190	3720	29140
10 PERCENT EXCEEDS	38	12	85
50 PERCENT EXCEEDS	13	4.0	18
90 PERCENT EXCEEDS	5.7	0.65	3.2

e Estimated.

PLATTE RIVER BASIN

06710992 TURKEY CREEK NEAR INDIAN HILLS, CO

LOCATION.--Lat 39°37'03", long 105°13'24", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.16, T.5 S., R.70 W., Jefferson County, Hydrologic Unit 10190002, on left bank 0.5 mi downstream from Parmalee Gulch and 1.0 mi east of Indian Hills.

DRAINAGE AREA.--45.9 mi².

PERIOD OF RECORD.--April 2001 to September 2002 (discontinued).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,620 ft above sea level, from topographic map.

REMARKS.--Records fair, except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.34	0.49	e0.58	e0.23	e0.29	e0.80	3.7	0.94	1.4	0.0	0.0	0.00
2	0.35	0.50	e0.57	e0.20	e0.31	e0.57	2.6	0.90	1.1	0.0	0.0	0.00
3	0.34	0.49	e0.63	e0.15	e0.33	e0.47	2.5	0.90	0.93	0.0	<0.01	0.00
4	0.28	0.59	e0.67	e0.15	e0.40	e0.53	2.5	0.90	1.4	0.0	<0.01	0.00
5	0.32	0.66	e0.70	e0.11	e0.40	e0.76	2.6	0.90	2.0	0.0	<0.01	0.00
6	0.41	0.69	e0.60	e0.13	e0.35	e0.83	2.5	0.90	1.7	<0.01	0.0	0.00
7	0.40	0.71	e0.63	e0.21	e0.56	e0.83	2.5	0.79	1.3	0.0	<0.01	0.00
8	0.43	1.0	e0.57	e0.29	e0.64	e0.83	2.5	0.66	0.89	0.0	0.0	0.00
9	0.41	0.97	e0.62	e0.38	e0.63	e0.81	2.3	0.66	0.50	0.0	0.0	0.0
10	0.40	0.96	e0.65	e0.46	e0.46	e0.78	2.3	0.66	0.38	0.0	0.0	0.03
11	0.37	0.97	e0.57	e0.39	e0.61	e1.1	2.4	0.68	0.31	0.0	0.0	0.18
12	0.38	1.0	e0.55	e0.43	e0.72	e0.99	2.4	1.3	0.20	0.0	0.0	0.60
13	0.37	1.1	e0.51	e0.46	e0.44	e1.2	2.1	1.7	0.16	0.0	0.0	2.0
14	0.34	1.0	e0.54	e0.38	e0.63	e1.1	2.1	1.6	0.13	0.0	0.0	1.4
15	0.47	0.96	e0.62	e0.33	e0.56	e0.89	2.1	1.6	0.12	0.0	0.00	0.72
16	0.51	0.92	e0.57	e0.30	e0.60	e0.87	2.1	1.6	0.10	0.0	0.00	0.42
17	0.45	0.87	e0.57	e0.27	e0.72	e0.92	1.9	1.6	0.07	0.0	0.00	0.27
18	0.40	0.92	e0.60	e0.26	e0.81	e0.91	1.8	1.6	0.05	0.0	0.00	0.78
19	0.41	0.99	e0.58	e0.26	e0.69	e0.91	1.6	1.6	0.03	0.0	0.00	4.0
20	0.39	0.95	e0.62	e0.29	e0.69	e0.97	1.4	1.6	0.03	0.0	0.00	2.1
21	0.43	1.00	e0.58	e0.23	e0.67	e1.3	1.2	1.4	0.03	0.0	0.00	1.2
22	0.45	e1.0	e0.59	e0.41	e0.65	e1.1	1.1	1.1	0.02	0.0	0.00	0.91
23	0.44	e1.0	e0.48	e0.41	0.84	e1.6	1.1	1.1	0.02	0.0	0.00	0.77
24	0.44	e1.0	e0.50	e0.29	e0.94	e2.1	1.1	3.1	<0.01	0.0	0.00	0.71
25	0.40	e0.85	e0.35	e0.36	e0.77	e2.0	1.1	3.9	<0.01	0.0	0.00	0.67
26	0.41	e0.75	e0.36	e0.45	e0.69	e2.0	1.1	5.8	0.0	0.0	0.00	0.74
27	0.49	e0.71	e0.48	e0.59	e0.72	e2.5	1.1	3.6	0.0	0.0	0.00	1.00
28	0.54	e0.67	e0.40	e0.51	e0.77	3.1	1.1	2.7	0.0	0.0	0.00	0.94
29	0.54	e0.61	e0.38	e0.44	---	3.2	1.1	2.1	0.0	0.0	0.00	0.78
30	0.54	e0.65	e0.28	e0.42	---	3.3	1.1	1.8	0.0	0.0	0.00	0.66
31	0.50	---	e0.27	e0.41	---	3.4	---	1.6	---	0.0	0.00	---
TOTAL	12.95	24.98	16.62	10.20	16.89	42.67	57.0	51.29	12.89	0.01	0.04	20.88
MEAN	0.42	0.83	0.54	0.33	0.60	1.38	1.90	1.65	0.43	0.000	0.001	0.70
MAX	0.54	1.1	0.70	0.59	0.94	3.4	3.7	5.8	2.0	0.01	0.01	4.0
MIN	0.28	0.49	0.27	0.11	0.29	0.47	1.1	0.66	0.00	0.00	0.00	0.00
AC-FT	26	50	33	20	34	85	113	102	26	0.02	0.08	41

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2002, BY WATER YEAR (WY)

	2001	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2001
MEAN	0.42	0.83	0.54	0.33	0.60	1.38	1.90	9.69	1.73	0.54	0.76	0.65
MAX	0.42	0.83	0.54	0.33	0.60	1.38	1.90	17.7	3.03	1.07	1.52	0.70
(WY)	2002	2002	2002	2002	2002	2002	2002	2001	2001	2001	2001	2002
MIN	0.42	0.83	0.54	0.33	0.60	1.38	1.90	1.65	0.43	0.000	0.001	0.60
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2001

SUMMARY STATISTICS

FOR 2002 WATER YEAR

WATER YEARS 2001 - 2002

ANNUAL TOTAL	266.42		
ANNUAL MEAN	0.73		
HIGHEST ANNUAL MEAN		0.73	2002
LOWEST ANNUAL MEAN		0.73	2002
HIGHEST DAILY MEAN	5.8	May 26	41 May 8 2001
LOWEST DAILY MEAN	0.00	Jun 26	a0.00 Jun 26 2002
ANNUAL SEVEN-DAY MINIMUM	0.00	Jun 26	0.00 Jun 26 2002
MAXIMUM PEAK FLOW	7.7	May 26	64 May 7 2001
MAXIMUM PEAK STAGE	3.93	May 26	4.77 May 7 2001
ANNUAL RUNOFF (AC-FT)	528		529
10 PERCENT EXCEEDS	1.8		1.8
50 PERCENT EXCEEDS	0.55		0.55
90 PERCENT EXCEEDS	0.00		0.00

e Estimated.

< Actual value is known to be less than the value shown.

a No flow on many days in 2002.

06711500 BEAR CREEK AT MOUTH, AT SHERIDAN, CO

LOCATION.--Lat 39°39'08", long 105°01'57", in NW¹/₄NW¹/₄ sec.5, T.5 S., R.68 W., Arapahoe County, Hydrologic Unit 10190002, on left bank just downstream from bridge on road to Fort Logan Mental Health Center, at Highway Department maintenance building at northwest city limits of Sheridan, 1.3 mi upstream from mouth, and 2.1 mi west of city hall in Englewood.

DRAINAGE AREA.--260 mi².

PERIOD OF RECORD.--April to November 1914, March 1927 to current year. Monthly discharge only prior to October 1933, published in WSP 1310. Published as "at Sheridan Junction" 1934-41.

REVISED RECORDS.--WSP 1730: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,295 ft above sea level, from topographic map. See WSP 1710 or 1730 for history of changes prior to Oct. 9, 1953. Oct. 9, 1953 to Aug. 6, 1969, water-stage recorder at present site at datum 1.0 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by Bear Creek Lake since July 1979. Storage and diversions upstream from station for irrigation of about 12,000 acres.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	19	12	12	17	6.0	15	6.2	4.4	1.2	0.24	0.77
2	9.5	18	13	12	17	6.8	13	7.4	4.4	1.3	0.12	0.58
3	9.4	18	15	14	16	6.0	11	7.5	4.6	7.2	0.12	0.83
4	8.8	19	17	17	16	6.8	9.2	7.6	13	2.0	0.17	0.80
5	10	19	17	16	16	6.7	6.9	6.7	11	2.2	3.9	0.93
6	10	17	18	15	15	6.1	7.5	5.7	16	8.6	1.7	1.2
7	10	16	18	15	15	5.6	11	5.0	13	2.1	1.4	1.4
8	9.7	20	16	15	15	5.5	11	4.6	9.2	2.4	1.6	1.5
9	13	18	14	13	15	6.6	9.2	4.7	7.0	6.1	3.5	2.2
10	16	16	14	15	e15	6.2	8.3	5.3	5.6	5.0	2.6	7.4
11	17	11	15	14	15	4.8	9.7	5.5	4.2	3.3	5.6	1.3
12	16	11	14	13	16	6.3	9.6	7.2	4.3	1.5	6.0	21
13	17	13	13	13	15	6.7	8.4	4.6	4.0	1.5	2.3	12
14	16	13	12	12	15	10	7.1	4.3	3.9	1.4	1.7	4.3
15	17	12	12	11	16	9.7	8.2	4.0	4.0	1.3	1.3	3.3
16	19	10	12	9.5	15	8.2	11	4.4	5.4	1.3	0.76	2.3
17	18	12	12	8.6	15	8.0	12	5.7	4.6	1.1	0.35	1.1
18	18	11	12	9.1	16	9.9	9.4	4.2	3.3	0.95	0.35	17
19	18	11	12	e11	17	11	7.7	4.2	2.9	1.2	0.24	11
20	18	9.2	12	e15	15	12	8.0	3.9	2.6	0.80	0.36	3.7
21	18	6.5	12	17	11	14	8.9	2.7	3.5	0.51	0.58	2.4
22	18	6.1	12	17	8.4	14	9.0	2.6	3.0	0.82	1.3	2.3
23	18	26	11	e15	7.4	14	7.1	3.3	2.2	0.95	0.78	1.7
24	18	16	10	e15	7.1	14	6.1	55	2.1	0.78	1.0	3.8
25	16	12	9.8	e17	7.5	15	5.4	25	1.9	0.36	0.95	4.2
26	13	10	9.4	19	7.4	14	5.4	14	1.9	0.23	0.88	5.0
27	15	11	10	19	6.8	12	6.2	9.7	1.7	0.45	2.0	4.4
28	17	11	11	18	6.0	13	6.7	7.9	2.9	0.60	1.4	3.3
29	17	9.7	12	18	---	12	7.3	7.3	1.9	0.68	1.7	3.1
30	14	10	12	18	---	13	6.9	5.0	1.3	0.39	1.2	3.4
31	15	---	12	17	---	15	---	4.8	---	0.24	0.88	---
TOTAL	459.4	411.5	401.2	450.2	373.6	298.9	262.2	246.0	149.8	58.46	46.98	128.21
MEAN	14.8	13.7	12.9	14.5	13.3	9.64	8.74	7.94	4.99	1.89	1.52	4.27
MAX	19	26	18	19	17	15	15	55	16	8.6	6.0	21
MIN	8.8	6.1	9.4	8.6	6.0	4.8	5.4	2.6	1.3	0.23	0.12	0.58
AC-FT	911	816	796	893	741	593	520	488	297	116	93	254

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2002, BY WATER YEAR (WY)

	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	23.8	23.5	21.7	19.9	19.3	22.2	53.6	152	104	37.6	39.2	25.0																																																																
MAX	151	99.8	61.3	46.3	43.5	94.4	394	859	630	238	255	256																																																																
(WY)	1985	1985	1985	1970	1942	1960	1942	1973	1949	1983	1984	1938																																																																
MIN	1.52	3.53	8.21	3.85	5.09	5.35	3.33	1.16	1.67	1.77	1.52	1.82																																																																
(WY)	1955	1955	1951	1945	1945	1935	1935	1963	1966	1963	2002	1956																																																																

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1927 - 2002

ANNUAL TOTAL	10133.9	3286.45	
ANNUAL MEAN	27.8	9.00	45.6
HIGHEST ANNUAL MEAN			157
LOWEST ANNUAL MEAN			6.53
HIGHEST DAILY MEAN	176	May 5	4020
LOWEST DAILY MEAN	6.1	Nov 22	0.00
ANNUAL SEVEN-DAY MINIMUM	9.4	Nov 16	0.28
MAXIMUM PEAK FLOW			750
MAXIMUM PEAK STAGE			4.86
ANNUAL RUNOFF (AC-FT)	20100	6520	33030
10 PERCENT EXCEEDS	55	17	98
50 PERCENT EXCEEDS	18	8.9	17
90 PERCENT EXCEEDS	12	1.2	6.0

e Estimated.

a Present datum, from floodmarks, from rating curve extended above 3400 ft³/s.

06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, CO

LOCATION.--Lat 39°39'54", long 105°00'13", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.33, T.4 S., R.68 W., Arapahoe County, Hydrologic Unit 10190002, on right bank, 0.3 mi downstream from Dartmouth Ave bridge at Englewood, and 1.4 mi downstream from Bear Creek.

DRAINAGE AREA.--3,387 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1983 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,250 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharge, which is fair. Natural flow of stream affected by transmountain diversions, storage and flood control reservoirs, power developments, diversions for irrigation and municipal use, and return flow from irrigated areas. Flow regulated by Chatfield Dam since May 29, 1975 (station 06709600), and Bear Creek Dam since July 1979.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	49	43	38	40	72	55	29	51	21	15	16
2	38	38	46	35	40	111	54	40	50	20	13	14
3	35	39	48	35	41	101	53	36	31	32	13	14
4	34	41	51	38	41	109	44	34	225	21	25	16
5	50	41	49	40	37	64	53	30	57	45	36	18
6	44	37	49	41	34	72	58	30	47	302	24	17
7	42	43	47	42	34	73	61	30	111	60	20	14
8	38	94	43	42	33	76	65	33	133	41	19	15
9	43	51	42	43	31	85	73	36	140	33	19	15
10	50	45	47	61	36	75	67	36	124	72	17	62
11	52	40	43	54	28	69	47	37	118	78	19	28
12	50	41	46	50	31	66	45	62	100	40	18	114
13	54	47	42	49	28	64	38	39	97	38	15	98
14	54	45	40	47	27	94	29	34	91	29	14	36
15	61	43	43	43	26	107	30	38	90	22	12	28
16	52	40	56	44	46	97	31	45	100	24	13	26
17	49	42	55	42	49	92	30	66	103	24	12	21
18	46	50	51	41	55	91	30	42	100	19	12	116
19	48	54	44	56	68	85	34	40	98	24	12	118
20	47	47	46	48	61	71	36	39	54	18	15	33
21	47	40	46	41	67	71	36	33	30	20	19	29
22	49	44	48	41	67	74	29	29	50	17	26	30
23	50	131	46	46	67	69	23	35	30	19	28	30
24	48	61	38	47	67	73	23	344	28	18	22	28
25	45	48	39	49	73	77	28	135	27	18	21	24
26	44	57	40	52	71	70	30	129	29	18	17	30
27	46	53	41	48	64	61	33	117	24	28	e26	29
28	48	43	41	46	60	59	32	81	24	32	67	27
29	52	39	41	43	---	51	26	69	32	31	85	27
30	52	41	41	42	---	51	23	63	22	28	34	27
31	53	---	39	41	---	52	---	62	---	24	20	---
TOTAL	1463	1484	1391	1385	1322	2382	1216	1873	2216	1216	708	1100
MEAN	47.19	49.47	44.87	44.68	47.21	76.84	40.53	60.42	73.87	39.23	22.84	36.67
MAX	61	131	56	61	73	111	73	344	225	302	85	118
MIN	34	37	38	35	26	51	23	29	22	17	12	14
AC-FT	2900	2940	2760	2750	2620	4720	2410	3720	4400	2410	1400	2180

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2002, BY WATER YEAR (WY)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	146.3	152.5	93.79	80.78	85.82	127.8	352.2	813.4	721.7	522.5	402.7	149.9								
MAX	1050	733	268	216	166	261	1074	2576	2479	2337	1574	724								
(WY)	1985	1985	1985	1985	1985	1983	1984	1987	1995	1995	1984	1984								
MIN	44.8	39.3	44.9	44.7	35.5	51.7	40.5	60.4	73.9	39.2	22.8	36.7								
(WY)	1993	1990	2002	2002	1991	1991	2002	2002	2002	2002	2002	2002								

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1983 - 2002

ANNUAL TOTAL	49905	17756		
ANNUAL MEAN	136.7	48.65	282.2	
HIGHEST ANNUAL MEAN			692	1984
LOWEST ANNUAL MEAN			48.6	2002
HIGHEST DAILY MEAN	1180	May 5	344	May 24
LOWEST DAILY MEAN	34	Oct 4	12	Aug 15
ANNUAL SEVEN-DAY MINIMUM	40	Oct 2	13	Aug 13
MAXIMUM PEAK FLOW			836	Sep 12
MAXIMUM PEAK STAGE			2.87	Sep 12
ANNUAL RUNOFF (AC-FT)	98990	35220	204400	
10 PERCENT EXCEEDS	307	83	612	
50 PERCENT EXCEEDS	92	42	124	
90 PERCENT EXCEEDS	43	20	47	

e Estimated.

a Also occurred Aug 17-19, 2002.

b From rating curve extended above 3800 ft³/s.

06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1985 to current year.
 PERIOD OF DAILY RECORD.--
 SPECIFIC CONDUCTANCE: March 1985 to current year.
 pH: March 1985 to current year.
 WATER TEMPERATURE: March 1985 to current year.
 DISSOLVED OXYGEN: March 1985 to current year.

INSTRUMENTATION.--Water-quality monitor since March 1985.

REMARKS.--Water temperature record is good, except for Oct. 1-3 and Jan. 2-4 which is fair. Specific conductance record is fair. pH record is fair. Dissolved oxygen record is fair except for Oct. 1 to Jan. 2, June 11, July 1-8, July 29 to Aug. 2, which is poor.

EXTREMES FOR PERIOD OF DAILY RECORD.--
 SPECIFIC CONDUCTANCE: Maximum, 1880 microsiemens/cm, Mar. 10, 2002; minimum, 139 microsiemens/cm, Aug. 17, 2000.
 pH: Maximum, 10.4 units, Aug. 27, 1997; minimum, 6.4 units, Oct. 18, 1989.
 WATER TEMPERATURE: Maximum, 29.0°C, Aug. 17, 1986, July 30, 1987, July 20, 2002; minimum, 0.0°C, freezing point on many days during winter.
 DISSOLVED OXYGEN: Maximum, 19.0 mg/L, Feb. 7 and 9, 1995; minimum, 0.2 mg/L, June 20-22, and July 3, 2002.

EXTREMES FOR CURRENT YEAR.--
 SPECIFIC CONDUCTANCE: Maximum, 1880 microsiemens/cm, Mar. 10; minimum, 281 microsiemens/cm, July 10.
 pH: Maximum, 9.5 units, June 8 and June 10; minimum, 7.3 units, Aug. 5.
 WATER TEMPERATURE: Maximum, 29.0°C, July 20; minimum, 0.0°C, several days.
 DISSOLVED OXYGEN: Maximum, 17.1 mg/L, Mar. 29; minimum, 0.2 mg/L, June 20-22, and July 3.

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.5	5.8	7.9	13.5	7.6	9.6	12.0	9.8	10.7	13.3	10.5	11.6
2	11.5	5.7	7.9	13.6	7.9	9.7	11.9	9.5	10.4	12.6	10.2	11.3
3	11.6	5.9	8.1	13.8	8.0	9.9	11.8	9.2	10.0	12.4	9.8	10.9
4	11.6	6.2	8.4	13.8	8.0	9.9	11.9	9.2	10.1	11.6	9.7	10.4
5	10.9	6.9	8.6	13.6	7.9	9.7	12.0	9.4	10.3	12.7	9.9	11.0
6	12.1	7.7	9.5	13.2	7.4	9.5	12.3	9.6	10.5	12.9	10.0	11.1
7	11.9	7.1	8.9	13.2	7.3	9.4	12.5	9.5	10.5	12.9	9.5	10.8
8	11.5	6.8	8.5	10.9	8.1	9.4	12.7	9.9	10.9	11.5	9.3	10.2
9	11.5	6.4	8.4	12.4	8.2	9.8	12.6	9.7	10.8	12.9	9.3	10.5
10	12.3	7.1	9.2	12.9	8.8	10.2	12.6	9.7	10.7	11.5	9.2	10.1
11	11.5	7.7	9.2	12.9	8.3	10.1	12.4	9.8	10.7	12.9	9.8	10.9
12	11.3	7.6	9.1	12.7	8.1	9.6	12.2	9.8	10.5	13.5	9.5	11.1
13	11.5	7.9	9.2	12.3	7.9	9.4	12.7	10.1	11.1	13.4	9.3	10.8
14	11.4	7.7	9.0	12.3	7.9	9.3	12.7	9.7	10.8	13.4	10.1	11.3
15	11.5	7.9	9.3	12.4	8.1	9.7	12.6	9.7	10.7	13.9	10.2	11.5
16	12.1	8.1	9.5	12.9	8.3	9.9	12.3	10.2	10.9	13.8	10.5	11.6
17	12.8	7.8	9.5	12.8	8.3	9.9	12.3	9.7	10.8	13.9	10.6	11.8
18	12.8	7.5	9.3	12.1	8.5	9.6	12.8	9.8	10.9	13.5	10.8	11.7
19	13.3	7.6	9.5	12.7	8.9	10.2	13.4	10.2	11.2	13.2	10.8	11.8
20	11.7	7.3	9.0	12.8	8.9	10.2	13.3	10.2	11.3	13.5	10.8	11.7
21	13.6	8.0	10.0	12.9	8.9	10.2	12.9	10.0	11.1	13.6	10.3	11.6
22	13.2	7.5	9.4	12.4	8.4	9.9	13.0	9.6	11.0	13.5	10.1	11.2
23	12.9	7.3	9.2	10.0	8.1	9.4	13.4	10.6	11.6	13.3	10.0	11.4
24	13.1	7.3	9.5	11.5	9.3	10.0	13.6	10.8	11.7	13.6	10.7	11.7
25	13.6	8.2	10.0	11.8	9.3	10.1	13.5	10.9	11.8	13.5	10.3	11.6
26	13.7	8.2	10.1	11.6	9.5	10.3	13.2	10.3	11.4	13.9	9.8	11.2
27	14.2	8.0	10.1	12.2	10.2	10.9	13.2	10.3	11.3	14.5	9.6	11.3
28	13.1	7.5	9.3	12.2	10.1	10.9	13.1	10.1	11.2	14.3	9.4	11.2
29	13.3	7.6	9.6	11.7	9.9	10.7	13.4	10.0	11.2	14.8	10.0	11.7
30	12.9	7.8	9.3	11.8	9.9	10.5	13.3	10.3	11.3	15.0	10.1	11.8
31	12.8	7.7	9.3	---	---	---	13.5	10.6	11.7	14.3	10.4	11.9
MONTH	14.2	5.7	9.2	13.8	7.3	9.9	13.6	9.2	10.9	15.0	9.2	11.2

PLATTE RIVER BASIN

06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, CO--Continued

PH, WATER, WATER, WHOLE, FIELD STANDARD UNITS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
1	8.1	7.7	7.9	8.4	7.8	7.9	8.1	7.9	8.0	8.1	7.8	7.9
2	8.1	7.8	7.8	8.4	7.8	8.0	8.1	7.8	7.9	8.2	7.8	8.0
3	8.2	7.8	7.9	8.4	7.9	8.0	8.2	7.9	8.0	8.2	7.9	8.0
4	8.3	7.8	8.0	8.4	7.9	8.0	8.2	7.8	8.0	8.2	7.9	8.0
5	8.2	7.9	8.0	8.4	7.9	8.0	8.1	7.8	7.9	8.1	7.9	8.0
6	8.2	7.9	8.0	8.4	7.8	8.0	8.2	7.9	8.0	8.2	7.9	8.0
7	8.3	7.9	8.0	8.4	7.8	8.0	8.2	7.9	8.0	8.2	7.9	8.0
8	8.3	7.9	8.0	8.1	7.8	8.0	8.2	7.9	8.0	8.1	7.9	8.0
9	8.4	7.9	8.1	8.2	7.8	8.0	8.2	7.9	8.0	8.3	7.9	8.0
10	8.4	8.0	8.1	8.3	8.0	8.1	8.2	7.9	8.0	8.1	7.9	8.0
11	8.3	8.0	8.1	8.4	8.0	8.1	8.2	7.9	8.0	8.1	7.9	8.0
12	8.3	8.0	8.0	8.4	8.0	8.1	8.2	7.9	8.0	8.3	7.9	8.0
13	8.4	8.0	8.1	8.4	8.0	8.0	8.1	7.8	8.0	8.3	7.9	8.1
14	8.4	8.0	8.1	8.4	8.0	8.1	8.2	7.8	7.9	8.2	7.9	8.0
15	8.4	8.0	8.1	8.4	8.0	8.1	8.2	7.9	8.0	8.3	7.9	8.2
16	8.3	7.8	8.0	8.4	8.0	8.1	8.1	7.9	8.0	8.3	8.0	8.2
17	8.4	7.8	8.0	8.5	8.0	8.1	8.1	7.8	8.0	8.3	8.0	8.1
18	8.3	7.8	7.9	8.4	8.0	8.1	8.2	7.9	7.9	8.2	7.9	8.1
19	8.4	7.8	8.0	8.4	8.0	8.1	8.2	7.9	8.0	8.3	7.9	8.0
20	8.2	7.8	8.0	8.4	8.0	8.1	8.2	7.9	8.0	8.3	8.0	8.0
21	8.4	7.8	8.0	8.4	8.0	8.1	8.2	7.9	8.0	8.2	8.0	8.1
22	8.3	7.8	7.9	8.4	8.0	8.1	8.2	7.9	8.0	8.3	8.0	8.1
23	8.3	7.8	7.9	8.3	8.0	8.2	8.1	7.9	8.0	8.2	8.0	8.1
24	8.3	7.8	8.0	8.2	8.0	8.1	8.1	7.9	7.9	8.2	7.9	8.0
25	8.3	7.8	7.9	8.3	8.0	8.1	8.2	7.9	8.0	8.2	7.9	8.0
26	8.3	7.8	7.9	8.3	8.1	8.2	8.2	7.9	8.0	8.4	7.9	8.1
27	8.3	7.8	7.9	8.3	8.0	8.2	8.2	7.9	8.0	8.4	7.9	8.1
28	8.2	7.8	7.9	8.3	8.0	8.1	8.2	7.9	8.0	8.4	8.0	8.1
29	8.4	7.8	8.0	8.2	7.9	8.1	8.2	7.9	8.0	8.4	7.9	8.1
30	8.3	7.9	8.0	8.1	7.9	8.0	8.1	7.9	8.0	8.4	8.0	8.1
31	8.4	7.8	8.0	---	---	---	8.1	7.9	7.9	8.3	8.0	8.1
MAX	8.4	8.0	8.1	8.5	8.1	8.2	8.2	7.9	8.0	8.4	8.0	8.2
MIN	8.1	7.7	7.8	8.1	7.8	7.9	8.1	7.8	7.9	8.1	7.8	7.9

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
1	8.4	8.0	8.1	8.6	8.0	8.3	8.6	7.8	8.4	8.1	7.7	7.9
2	8.4	8.0	8.1	8.6	8.0	8.3	8.4	7.9	8.1	8.4	7.8	8.0
3	8.4	8.0	8.2	8.6	8.0	8.2	8.6	8.0	8.4	8.4	7.8	8.0
4	8.4	8.0	8.2	8.7	8.0	8.2	8.7	7.9	8.2	8.4	7.8	8.0
5	8.4	8.0	8.2	8.5	7.8	8.1	8.7	7.9	8.4	8.4	7.8	8.0
6	8.4	8.0	8.1	8.8	8.0	8.4	8.8	7.9	8.5	8.4	7.8	7.9
7	8.5	8.0	8.1	8.8	7.9	8.5	8.7	7.9	8.5	8.4	7.8	7.9
8	8.5	8.0	8.1	8.7	8.0	8.3	8.8	7.9	8.4	8.3	7.8	8.0
9	8.4	8.0	8.1	8.7	8.0	8.3	8.9	7.9	8.6	8.5	7.9	8.1
10	8.3	7.9	8.0	8.8	7.9	8.3	8.8	7.9	8.4	8.4	7.8	8.1
11	8.4	7.8	8.0	8.9	7.9	8.4	8.4	7.8	8.0	8.4	7.8	8.0
12	8.4	8.0	8.1	9.0	7.9	8.5	8.6	7.8	8.0	8.2	7.8	8.0
13	8.4	8.0	8.1	9.0	7.9	8.5	8.4	7.8	7.9	8.4	7.8	8.0
14	8.3	7.9	8.0	8.7	7.9	8.2	8.4	7.7	7.9	8.3	7.8	7.9
15	8.3	7.8	8.0	8.9	7.9	8.2	8.3	7.7	7.9	8.2	7.7	7.9
16	8.5	8.0	8.3	9.0	7.9	8.3	8.4	7.8	8.0	8.0	7.7	7.8
17	8.6	8.0	8.3	9.0	7.9	8.4	8.5	7.8	8.0	8.1	7.7	7.9
18	8.7	8.0	8.4	9.0	7.9	8.5	8.6	7.8	8.1	8.5	7.7	8.1
19	8.7	8.0	8.4	9.0	7.9	8.4	8.5	8.0	8.2	8.5	7.7	8.1
20	8.8	8.0	8.4	8.9	7.9	8.6	8.5	8.0	8.2	8.4	7.7	8.1
21	8.9	8.0	8.5	8.9	7.9	8.5	8.6	8.0	8.2	8.6	7.6	8.0
22	8.9	8.0	8.4	9.0	8.0	8.6	8.6	7.9	8.1	8.6	8.0	8.2
23	9.0	7.9	8.4	8.9	7.9	8.5	8.5	7.8	8.0	8.6	7.8	8.1
24	8.8	7.9	8.4	8.8	7.9	8.5	8.5	7.8	8.0	8.2	7.8	7.9
25	8.7	8.0	8.4	8.9	7.9	8.4	8.5	7.8	8.0	8.9	7.8	8.2
26	8.6	8.0	8.3	9.0	8.0	8.5	8.4	7.9	8.0	9.0	7.7	8.3
27	8.7	7.9	8.3	8.8	7.9	8.4	8.5	7.9	8.0	9.0	7.7	8.5
28	8.6	8.0	8.3	8.8	7.9	8.4	8.5	7.9	8.0	9.1	7.7	8.5
29	---	---	---	8.6	7.9	8.3	8.4	7.8	7.9	9.2	7.7	8.6
30	---	---	---	8.6	7.9	8.2	8.3	7.7	7.9	9.2	7.9	8.8
31	---	---	---	8.6	7.9	8.1	---	---	---	9.2	7.8	8.9
MAX	9.0	8.0	8.5	9.0	8.0	8.6	8.9	8.0	8.6	9.2	8.0	8.9
MIN	8.3	7.8	8.0	8.5	7.8	8.1	8.3	7.7	7.9	8.0	7.6	7.8

PLATTE RIVER BASIN

06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, CO--Continued

PH, WATER, WATER, WHOLE, FIELD STANDARD UNITS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002												
DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	9.2	7.9	8.9	8.8	7.6	7.9	7.8	7.4	7.6	8.0	7.5	7.7
2	9.4	8.1	9.0	8.8	7.6	8.0	7.8	7.4	7.6	8.0	7.6	7.7
3	9.3	8.2	8.8	8.0	7.5	7.6	7.7	7.5	7.6	8.1	7.6	7.8
4	8.6	7.9	8.1	8.2	7.5	7.7	7.8	7.4	7.6	8.1	7.6	7.8
5	9.1	8.0	8.6	8.5	7.6	7.8	7.7	7.3	7.6	8.2	7.7	7.8
6	9.3	8.1	8.6	8.0	7.6	7.8	7.8	7.4	7.5	8.2	7.7	7.8
7	9.3	8.0	8.7	7.9	7.6	7.8	7.9	7.6	7.7	8.2	7.6	7.7
8	9.5	8.1	8.7	8.0	7.7	7.8	7.9	7.6	7.6	8.2	7.6	7.8
9	9.2	8.1	8.6	8.0	7.7	7.8	8.0	7.5	7.7	7.9	7.6	7.7
10	9.5	8.1	8.8	8.2	7.7	7.8	7.9	7.5	7.6	8.1	7.7	7.8
11	9.2	8.1	8.6	7.8	7.6	7.7	8.0	7.6	7.7	8.0	7.6	7.8
12	9.2	7.6	8.5	8.0	7.6	7.8	8.0	7.6	7.8	---	---	---
13	9.2	7.6	8.6	8.1	7.8	7.9	7.9	7.6	7.7	---	---	---
14	9.2	7.7	8.5	8.0	7.7	7.9	7.9	7.6	7.7	---	---	---
15	9.1	7.6	8.6	8.0	7.6	7.8	7.9	7.5	7.6	---	---	---
16	9.1	7.6	8.4	8.1	7.7	7.8	7.9	7.5	7.6	---	---	---
17	9.2	7.5	8.4	8.0	7.7	7.8	7.9	7.5	7.6	---	---	---
18	9.1	7.6	8.5	8.0	7.7	7.8	7.8	7.5	7.6	---	---	---
19	9.0	7.6	8.4	8.1	7.7	7.9	7.9	7.5	7.7	---	---	---
20	8.6	7.5	7.7	8.0	7.7	7.8	8.1	7.6	7.8	---	---	---
21	8.7	7.5	7.7	8.1	7.7	7.8	8.1	7.6	7.7	---	---	---
22	8.6	7.5	7.6	8.0	7.7	7.8	7.8	7.5	7.6	---	---	---
23	8.7	7.5	7.9	8.0	7.7	7.8	8.0	7.5	7.7	---	---	---
24	9.0	7.6	8.1	8.0	7.7	7.8	8.1	7.6	7.7	---	---	---
25	9.0	7.6	8.1	8.0	7.7	7.8	8.1	7.6	7.8	---	---	---
26	9.0	7.8	8.2	8.0	7.6	7.8	8.2	7.6	7.7	---	---	---
27	8.9	7.6	8.1	8.1	7.6	7.8	8.1	7.5	7.6	---	---	---
28	8.9	7.6	8.0	8.0	7.6	7.8	7.9	7.6	7.7	---	---	---
29	8.7	7.6	7.9	8.0	7.6	7.8	8.0	7.6	7.8	---	---	---
30	8.8	7.5	7.9	7.9	7.6	7.7	7.8	7.5	7.6	---	---	---
31	---	---	---	7.8	7.6	7.6	7.9	7.6	7.7	---	---	---
MAX	9.5	8.2	9.0	8.8	7.8	8.0	8.2	7.6	7.8	---	---	---
MIN	8.6	7.5	7.6	7.8	7.5	7.6	7.7	7.3	7.5	---	---	---

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	930	835	878	886	810	846	985	831	925	1200	872	968
2	989	842	906	895	809	858	952	823	896	1130	893	987
3	971	863	923	891	812	856	937	807	881	1290	894	1120
4	976	908	945	906	795	858	939	758	863	1210	965	1070
5	1000	871	942	907	800	866	879	798	845	1300	965	1120
6	965	878	920	943	821	888	922	822	873	1330	1070	1210
7	927	874	903	940	628	879	926	821	884	1320	1010	1180
8	968	880	928	880	615	772	957	823	898	1150	899	1010
9	969	831	903	797	741	763	973	864	930	1030	877	959
10	995	810	896	874	777	828	968	860	919	1740	921	1280
11	932	772	814	916	841	887	962	874	920	1740	1150	1420
12	823	790	808	936	784	882	1080	876	970	1320	974	1110
13	832	773	805	961	749	819	1100	941	1030	1060	896	968
14	802	719	770	870	785	827	1190	958	1080	1010	859	944
15	824	722	761	906	800	849	1050	879	960	1030	905	968
16	824	749	791	958	824	882	1530	882	1140	1000	899	957
17	859	789	825	897	817	863	1850	1270	1580	996	868	920
18	863	795	837	907	731	845	1700	991	1270	1040	892	960
19	863	788	832	965	811	884	1100	938	1020	1100	905	1010
20	892	797	847	905	790	851	1010	896	956	1060	900	980
21	905	820	867	957	850	887	1000	877	949	1030	907	973
22	885	808	853	947	790	900	1090	938	1000	1040	904	959
23	985	787	855	822	605	700	1350	1040	1200	1360	914	1070
24	890	809	850	748	672	694	1340	1010	1190	1470	1120	1290
25	902	817	865	947	738	837	1150	973	1050	1620	1250	1420
26	895	824	862	1480	945	1170	1070	914	1010	1530	1050	1250
27	893	831	866	1620	1160	1380	1020	896	958	1150	906	1030
28	891	772	839	1340	1020	1160	1000	869	942	1010	828	939
29	953	799	860	1160	985	1070	981	859	934	991	869	932
30	887	826	856	1090	890	999	958	873	918	1070	885	958
31	896	821	862	---	---	---	999	875	926	1030	901	958
MONTH	1000	719	860	1620	605	893	1850	758	997	1740	828	1060

PLATTE RIVER BASIN

06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	1060	909	977	927	672	812	856	774	820	1210	919	1010
2	1080	918	984	1260	665	897	900	739	821	1030	915	975
3	1050	896	958	1160	814	994	885	789	835	1030	931	982
4	1030	900	952	1520	911	1110	938	776	864	1000	913	960
5	1020	895	959	1520	1140	1290	932	715	853	1020	905	963
6	1040	865	944	1230	723	908	832	715	780	1030	920	978
7	1020	905	963	872	717	807	846	715	779	1020	918	969
8	1000	903	956	858	717	803	820	687	753	1000	921	963
9	1020	901	967	1760	750	1130	759	620	692	987	905	947
10	1100	896	993	1880	886	1290	773	652	697	977	906	943
11	1040	891	967	1120	711	920	935	709	855	1000	877	941
12	1020	923	972	876	671	779	983	896	941	---	720	---
13	1440	876	966	810	648	736	1020	902	963	---	---	---
14	1190	921	1020	1170	700	991	1040	917	988	982	---	---
15	1130	927	1030	1500	774	1090	1150	905	990	974	926	954
16	1140	788	1010	1500	730	997	1040	930	983	972	765	907
17	913	743	830	960	623	772	1060	924	981	985	826	889
18	963	720	802	871	633	721	1070	913	992	959	898	919
19	1280	731	1060	1010	742	866	1080	969	1020	993	900	942
20	976	680	808	873	688	796	1040	947	997	1000	891	951
21	782	624	709	812	672	750	1050	913	982	988	906	952
22	749	627	698	789	667	733	1070	932	1000	1010	920	970
23	751	612	689	809	669	753	1110	989	1050	1010	561	937
24	767	611	696	820	676	749	1110	966	1040	597	409	500
25	997	656	793	861	707	786	1090	943	1020	643	588	613
26	1210	786	952	824	694	765	1070	965	1020	647	552	600
27	1090	819	942	903	710	814	1040	937	990	639	555	596
28	1020	760	890	828	713	766	1050	930	991	702	597	658
29	---	---	---	858	711	800	1060	960	1010	702	617	664
30	---	---	---	869	759	816	1110	958	1030	745	584	682
31	---	---	---	867	762	819	---	---	---	718	601	669
MONTH	1440	611	910	1880	623	879	1150	620	925	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	776	595	710	1000	928	959	1040	839	911	1120	1050	1080
2	767	647	715	1010	921	958	1050	925	983	1160	1070	1110
3	889	702	788	992	639	824	1110	951	1020	1170	1070	1110
4	1010	415	546	1040	909	960	1110	875	982	1150	1000	1090
5	777	521	673	1050	474	887	1010	288	865	1110	1020	1060
6	855	767	798	671	290	422	1040	811	969	1130	1020	1060
7	837	560	668	893	508	730	1050	958	1010	1130	1030	1080
8	619	523	585	1090	887	1000	1060	992	1020	1120	1040	1080
9	590	518	552	1050	952	1000	1070	980	1020	1130	914	1090
10	586	529	561	1050	281	912	1060	987	1020	960	678	829
11	594	504	554	736	487	641	1030	960	993	952	866	919
12	597	523	564	971	731	853	1030	947	979	---	---	---
13	596	508	561	1030	933	978	1090	957	1010	---	---	---
14	601	526	565	1060	922	983	1100	1020	1050	---	---	---
15	609	530	578	1060	937	998	1090	1020	1060	---	---	---
16	616	531	577	1030	921	976	1100	1020	1060	---	---	---
17	608	516	569	1010	879	957	1130	1020	1060	---	---	---
18	592	507	556	1030	920	966	1140	1030	1080	---	---	---
19	693	510	550	987	894	936	1130	1030	1070	---	---	---
20	844	553	670	1030	909	962	1100	1010	1050	---	---	---
21	856	603	805	1020	916	964	1080	782	1010	---	---	---
22	888	636	724	1070	958	1010	1020	654	950	---	---	---
23	900	781	839	1120	953	1020	1050	944	1020	---	---	---
24	975	878	928	1040	953	998	1030	976	1010	---	---	---
25	987	873	934	1020	950	978	1060	1020	1040	---	---	---
26	1160	884	967	1040	950	993	1100	1030	1060	---	---	---
27	941	880	910	1020	912	969	1120	604	978	---	---	---
28	993	835	941	935	801	860	883	739	822	---	---	---
29	1030	846	923	904	785	844	965	341	734	---	---	---
30	983	861	920	922	782	846	954	542	778	---	---	---
31	---	---	---	913	807	859	1080	954	1020	---	---	---
MONTH	1160	415	708	1120	281	911	1140	288	988	---	---	---

PLATTE RIVER BASIN

06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, CO--Continued

TEMPERATURE, WATER (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	19.5	14.8	16.7	12.2	8.9	10.3	4.9	1.5	3.1	2.9	1.3	2.0
2	19.0	14.7	16.5	11.9	8.1	9.9	5.8	2.7	4.0	2.5	0.2	1.3
3	19.4	14.0	16.3	12.0	8.2	9.8	6.5	4.2	5.1	3.1	0.0	1.4
4	16.4	13.3	14.8	12.0	7.8	9.7	6.2	4.1	5.0	2.8	1.4	2.1
5	13.3	10.0	11.4	12.4	8.2	10.0	5.7	3.4	4.3	2.5	0.1	1.5
6	14.3	8.4	11.2	12.9	8.6	10.5	5.7	2.7	4.1	3.8	0.8	2.2
7	14.8	11.6	13.0	12.5	7.9	10.3	5.5	3.0	4.1	5.3	2.0	3.5
8	16.9	11.9	14.2	10.3	7.0	8.5	4.3	1.5	2.8	4.8	3.7	4.2
9	15.8	12.6	14.2	9.7	6.0	7.7	4.9	1.8	3.2	6.1	3.2	4.5
10	13.3	10.5	11.9	9.3	5.5	7.2	4.6	2.4	3.3	5.8	3.8	4.5
11	12.0	9.4	10.7	10.0	5.7	7.6	4.3	1.7	2.9	4.4	1.9	3.3
12	12.5	9.6	10.8	11.0	7.1	8.7	3.6	1.8	2.9	5.4	2.0	3.7
13	13.4	9.1	10.9	10.7	7.9	9.1	2.8	0.4	1.7	5.0	2.6	3.7
14	13.4	9.4	11.2	11.4	8.3	9.6	4.3	1.3	2.7	3.9	1.0	2.4
15	12.7	9.7	10.9	10.8	7.3	8.9	4.4	2.5	3.1	3.4	0.9	2.0
16	12.3	8.4	10.2	11.0	7.4	9.0	3.9	1.3	2.5	3.6	1.2	2.1
17	13.0	9.4	10.9	10.8	7.0	8.7	5.0	1.8	3.1	3.0	0.3	1.6
18	13.5	9.8	11.3	8.9	6.4	7.7	4.6	2.5	3.3	1.7	0.0	0.8
19	13.5	9.3	11.2	8.6	5.4	6.8	4.3	1.7	2.8	2.1	0.0	0.8
20	11.4	9.1	10.4	8.3	5.1	6.5	4.0	1.9	2.8	2.5	0.1	1.0
21	10.9	8.1	9.5	7.9	4.4	6.1	4.6	1.6	3.0	4.4	0.6	2.2
22	13.4	9.8	11.2	8.2	5.5	6.7	4.1	1.8	3.0	5.2	1.8	3.3
23	13.5	9.4	11.2	7.6	5.8	6.5	3.2	0.4	1.7	3.1	0.5	2.1
24	11.0	7.7	9.3	6.8	4.1	5.4	3.0	0.4	1.6	2.7	0.0	1.0
25	10.6	6.6	8.4	5.5	3.7	4.5	3.0	0.2	1.5	4.0	0.6	2.2
26	10.9	7.0	8.7	4.7	3.1	3.7	4.2	1.2	2.4	5.8	2.3	3.9
27	11.9	7.2	9.4	3.8	1.6	2.7	4.1	1.5	2.5	6.0	2.5	4.2
28	12.0	10.2	11.0	3.6	0.9	2.1	4.3	1.6	2.8	4.3	2.6	3.5
29	12.1	9.6	10.8	3.9	1.1	2.3	4.2	2.3	3.1	3.7	1.7	2.7
30	11.6	9.6	10.4	5.0	2.3	3.3	3.2	1.9	2.5	3.9	1.6	2.4
31	12.5	9.8	10.8	---	---	---	3.1	0.6	1.8	3.2	0.2	1.6
MONTH	19.5	6.6	11.6	12.9	0.9	7.3	6.5	0.2	3.0	6.1	0.0	2.5
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	3.6	0.2	1.6	3.8	0.1	1.1	15.5	10.1	12.7	16.7	10.4	13.5
2	3.4	0.8	2.0	2.1	0.1	0.9	12.2	5.5	7.7	16.1	9.1	12.1
3	4.5	0.5	2.4	2.9	0.0	1.4	10.9	3.9	7.5	18.0	11.0	14.4
4	5.2	1.4	3.0	6.4	0.5	3.4	14.0	6.1	9.9	18.1	12.7	15.4
5	5.0	1.4	3.0	7.7	2.3	4.9	15.1	8.4	11.8	19.0	12.7	15.8
6	5.2	1.0	2.8	9.0	4.5	6.7	13.3	9.9	11.8	20.0	12.9	16.0
7	5.6	1.4	3.3	9.4	4.7	7.3	14.7	9.6	11.9	20.8	13.4	16.5
8	7.0	2.6	4.1	7.5	0.5	4.0	14.2	10.1	11.8	16.6	13.1	15.2
9	2.8	0.2	1.7	5.9	0.0	2.7	15.8	9.4	12.7	17.2	10.1	13.7
10	3.6	0.1	1.5	8.6	2.9	5.8	14.2	11.4	12.8	15.4	12.4	14.1
11	5.4	1.1	2.9	10.1	5.6	7.9	16.4	10.5	13.2	15.2	12.0	13.3
12	5.9	2.1	3.5	10.0	5.7	8.0	17.5	10.8	13.8	13.7	10.3	11.7
13	6.4	0.8	3.3	10.4	6.3	8.6	19.1	11.7	15.0	18.6	9.9	14.0
14	4.0	1.9	2.9	8.4	2.9	4.7	19.7	12.7	15.9	17.3	13.6	15.2
15	5.7	0.2	2.9	7.3	1.8	4.5	18.9	13.8	15.9	16.9	13.4	15.1
16	7.1	1.6	4.2	8.7	3.4	6.3	17.8	12.4	14.7	14.9	11.7	12.9
17	8.1	3.1	5.6	7.5	3.2	5.7	18.0	10.3	13.8	15.9	10.9	13.3
18	7.6	4.3	6.2	7.7	3.6	5.8	17.5	10.5	13.4	20.6	13.1	16.7
19	8.6	4.7	6.6	10.2	4.0	7.0	14.2	9.6	11.6	20.8	15.5	18.1
20	7.5	4.3	5.7	11.1	5.5	8.5	12.4	9.4	10.7	17.8	15.0	16.3
21	7.2	3.3	5.4	8.8	4.0	5.8	15.4	7.6	11.2	19.5	14.3	16.2
22	6.9	3.8	5.5	9.8	2.5	6.1	17.7	9.4	13.1	20.4	12.4	15.8
23	9.2	4.7	7.0	11.5	6.5	9.1	19.6	9.9	14.6	17.5	12.6	14.7
24	8.3	5.4	6.4	9.1	4.7	7.0	18.8	10.5	14.6	12.6	8.7	10.1
25	5.4	1.2	2.8	6.7	3.9	5.3	15.2	10.5	12.8	19.7	10.2	14.5
26	3.9	0.0	2.1	11.0	3.9	7.5	16.4	10.6	13.3	19.0	13.0	16.4
27	4.8	1.3	3.1	13.1	6.7	9.9	18.5	12.4	14.7	19.8	13.5	17.0
28	6.3	1.4	3.9	14.3	7.6	11.0	19.9	11.8	15.4	20.8	15.0	18.2
29	---	---	---	13.0	7.9	10.3	20.4	12.9	16.5	20.1	16.2	18.6
30	---	---	---	13.3	7.5	10.3	21.2	12.3	16.5	23.2	16.3	20.0
31	---	---	---	14.8	7.3	11.1	---	---	---	22.7	18.7	21.0
MONTH	9.2	0.0	3.8	14.8	0.0	6.4	21.2	3.9	13.0	23.2	8.7	15.3

PLATTE RIVER BASIN

06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, CO--Continued

TEMPERATURE, WATER (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	22.6	18.4	20.4	26.0	19.8	23.0	25.2	20.3	22.4	23.6	18.1	20.8
2	23.8	17.3	20.4	26.8	20.6	23.6	24.6	18.4	21.0	24.9	16.7	20.4
3	23.2	17.9	20.4	25.0	19.8	22.3	23.8	19.0	21.4	22.3	17.1	19.8
4	18.7	14.8	15.7	26.6	19.2	22.4	26.4	19.3	22.6	24.9	17.3	20.3
5	21.7	13.6	17.5	26.6	19.8	22.9	27.1	20.7	22.8	24.9	16.9	20.6
6	24.1	16.8	20.3	23.8	19.6	21.3	25.5	19.5	22.1	24.3	17.9	20.9
7	21.4	18.8	20.2	26.4	20.0	23.0	27.1	19.0	22.3	24.3	17.4	20.8
8	22.5	15.5	19.2	28.0	21.2	24.2	25.9	19.0	22.1	24.0	18.5	21.0
9	21.5	15.9	18.9	28.4	21.2	24.6	25.7	18.2	21.6	20.8	18.6	19.6
10	20.3	16.0	18.4	27.2	19.0	23.4	27.1	17.9	22.3	19.2	17.3	18.1
11	22.5	14.9	18.8	26.1	19.3	22.4	26.8	18.6	22.6	21.4	16.7	18.7
12	23.1	16.3	20.0	27.3	20.6	23.8	23.8	17.7	20.6	---	---	---
13	21.7	16.1	19.2	27.0	20.4	23.6	23.7	15.9	19.5	---	---	---
14	22.0	16.2	19.5	28.1	21.0	24.2	25.8	16.6	20.8	---	---	---
15	20.5	16.8	18.9	28.6	20.0	23.9	25.7	17.4	21.3	---	---	---
16	23.8	16.7	20.3	28.5	20.5	24.2	27.4	18.0	22.4	---	---	---
17	24.2	17.0	20.9	28.5	20.5	24.1	25.0	17.9	21.2	---	---	---
18	23.9	17.1	20.9	28.7	20.3	24.1	23.3	17.7	20.0	---	---	---
19	23.1	17.4	20.6	28.3	20.4	24.2	23.3	16.3	19.6	---	---	---
20	23.5	18.5	20.8	29.0	21.3	24.7	23.2	17.8	20.4	---	---	---
21	24.2	18.8	21.3	28.5	21.8	24.7	24.3	18.4	20.7	---	---	---
22	24.6	19.3	21.7	27.1	21.0	23.6	22.4	17.7	19.7	---	---	---
23	26.1	19.8	22.7	24.9	20.0	22.4	21.7	16.8	19.1	---	---	---
24	25.7	19.9	22.5	27.6	19.2	23.2	25.0	17.6	20.8	---	---	---
25	24.2	19.7	21.6	25.7	20.7	23.0	26.3	19.1	22.1	---	---	---
26	25.3	18.3	21.4	26.8	19.2	22.6	26.4	19.3	22.4	---	---	---
27	25.7	19.3	22.1	26.3	19.9	23.1	24.5	19.0	20.9	---	---	---
28	25.7	18.7	21.8	25.9	20.5	23.0	22.3	17.6	19.8	---	---	---
29	25.7	19.6	22.5	26.9	19.6	23.1	22.8	17.4	19.2	---	---	---
30	25.3	19.8	22.6	27.7	21.0	23.9	23.1	17.1	19.8	---	---	---
31	---	---	---	27.2	20.3	23.8	25.0	17.8	20.9	---	---	---
MONTH	26.1	13.6	20.4	29.0	19.0	23.4	27.4	15.9	21.1	---	---	---

393109104464500 CHERRY CREEK NEAR PARKER, CO

LOCATION.--Lat 39°31'09", long 104°46'45", in SE¹/₄NW¹/₄NE¹/₄ sec.21, T.6 S., R.67 W., Douglas County, Hydrologic Unit 10190003, on right bank 200 ft upstream from Main Street, 1,100 ft downstream from mouth of Sulphur Gulch, and 0.8 mi west of City of Parker.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,805 ft above sea level, from topographic map.

REMARKS.--Records poor. Several diversions upstream from station for irrigation. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	4.2	3.5	7.7	7.0	e13	13	6.9	6.4	4.4	1.5	2.7
2	4.3	4.0	3.4	8.0	7.9	e14	14	5.6	6.6	4.6	1.2	1.6
3	3.6	4.1	3.6	7.0	8.3	e14	13	6.1	7.2	4.7	1.3	2.6
4	4.1	4.0	3.4	7.7	8.8	e10	9.4	6.9	6.3	4.4	1.3	3.4
5	3.9	3.8	3.4	7.5	9.0	14	9.0	7.0	4.8	4.6	1.3	3.7
6	4.0	3.7	3.4	7.5	8.5	15	9.1	7.2	3.0	4.7	1.4	3.8
7	3.9	3.8	3.3	6.7	7.8	14	9.0	7.0	3.7	4.9	3.2	4.3
8	3.9	2.9	3.5	7.9	8.0	14	8.9	7.0	4.4	4.9	3.9	4.4
9	3.9	3.6	3.7	8.5	7.1	11	8.2	7.0	4.4	4.8	4.0	5.0
10	4.1	3.7	2.2	8.6	6.2	14	7.8	6.9	4.7	9.1	3.9	4.6
11	3.9	3.7	1.6	8.0	8.7	14	7.9	7.0	4.7	4.6	4.1	5.0
12	4.0	3.8	1.5	8.5	9.6	16	7.6	6.8	4.5	3.8	4.3	5.3
13	4.0	3.7	1.5	9.6	8.5	16	7.1	7.1	3.5	3.7	4.1	6.2
14	4.1	3.7	4.8	8.3	8.7	17	6.6	7.0	2.5	3.9	4.2	8.4
15	2.9	2.2	9.0	7.7	7.8	15	5.8	7.1	1.4	1.9	2.3	4.6
16	3.8	2.2	8.4	7.8	8.5	16	6.5	7.3	1.3	0.98	2.6	4.4
17	4.5	1.7	8.2	5.6	10	16	6.6	6.9	1.3	1.8	4.2	4.3
18	4.5	1.7	8.2	4.7	10	16	6.6	6.9	e2.5	3.3	4.5	4.6
19	4.3	1.7	7.9	7.1	11	15	6.6	7.0	e3.6	3.3	4.7	2.3
20	4.6	2.8	8.0	7.5	10	14	6.3	6.9	e3.8	3.5	4.6	2.1
21	4.5	3.6	8.2	7.6	9.3	14	6.6	6.9	e3.0	3.5	4.7	2.0
22	4.7	2.5	8.1	8.3	10	15	7.0	6.7	e2.9	3.7	4.8	2.0
23	4.5	3.1	8.0	8.0	11	15	6.9	4.2	e3.1	3.8	4.9	1.9
24	4.5	2.1	8.0	7.6	12	15	6.7	4.6	e3.4	3.8	5.3	1.8
25	4.4	1.4	7.8	7.3	11	15	6.7	6.4	e3.6	4.0	5.5	1.7
26	4.1	1.4	7.9	10	e11	15	6.6	6.3	e3.8	2.7	3.7	1.7
27	4.4	3.0	7.9	11	10	15	6.6	6.5	4.1	1.2	35	1.7
28	e4.4	3.7	7.6	11	11	15	7.0	6.6	4.3	1.2	3.9	1.7
29	e4.3	2.0	7.7	9.7	---	15	7.1	6.8	4.3	2.4	2.0	1.7
30	4.3	2.1	7.8	9.4	---	13	6.8	6.9	4.4	3.9	3.3	1.7
31	4.4	---	7.9	7.6	---	12	---	5.4	---	2.3	2.9	---
TOTAL	128.5	89.9	179.4	249.4	256.7	447	237.0	204.9	117.5	114.38	138.6	101.2
MEAN	4.15	3.00	5.79	8.05	9.17	14.4	7.90	6.61	3.92	3.69	4.47	3.37
MAX	4.7	4.2	9.0	11	12	17	14	7.3	7.2	9.1	35	8.4
MIN	2.9	1.4	1.5	4.7	6.2	10	5.8	4.2	1.3	0.98	1.2	1.6
AC-FT	255	178	356	495	509	887	470	406	233	227	275	201

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2002, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	
MEAN	3.77	5.20	6.15	8.16	11.7	17.2	18.8	20.3	11.5	6.73	8.04	3.55
MAX	9.72	9.85	14.9	21.0	21.4	42.8	47.4	87.9	47.5	18.3	29.1	10.3
(WY)	2000	2000	2000	2000	2000	1992	1998	1999	1999	1998	1998	1999
MIN	1.26	0.79	0.76	1.51	1.74	3.82	7.90	4.15	1.87	1.04	0.58	0.73
(WY)	1992	1995	1995	1995	1995	1995	2002	1997	1994	1994	1994	1994

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1992 - 2002

ANNUAL TOTAL	3595.9	2264.48	
ANNUAL MEAN	9.85	6.20	10.1
HIGHEST ANNUAL MEAN			21.8 1999
LOWEST ANNUAL MEAN			5.03 1997
HIGHEST DAILY MEAN	137 May 6	35 Aug 27	e348 May 1 1999
LOWEST DAILY MEAN	1.3 Jun 12	0.98 Jul 16	0.43 Aug 24 1994
ANNUAL SEVEN-DAY MINIMUM	2.2 Aug 17	1.5 Jul 31	0.45 Aug 21 1994
MAXIMUM PEAK FLOW		163 Aug 27	a900 Jul 30 1998
MAXIMUM PEAK STAGE		5.64 Aug 27	b9.65 Jul 30 1998
ANNUAL RUNOFF (AC-FT)	7130	4490	7300
10 PERCENT EXCEEDS	19	11	21
50 PERCENT EXCEEDS	5.5	4.8	6.1
90 PERCENT EXCEEDS	2.7	2.1	1.4

e Estimated.
a From slope-area measurement of peak flow.
b From floodmark.

06713300 CHERRY CREEK AT GLENDALE, CO

LOCATION.--Lat 39°42'22", long 104°56'13", in SW¹/₄NW¹/₄ sec.18, T.4 S., R.67 W., Denver County, Hydrologic Unit 10190003, on left bank 900 ft upstream from Colorado Boulevard, on Cherry Creek South Drive and Ash Court, in the City of Glendale, and 6 mi downstream from Cherry Creek Reservoir.

DRAINAGE AREA.--404 mi².

PERIOD OF RECORD.--January 1985 to current year.

REVISED RECORDS.--WDR CO-96-1: 1995 (M).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5320 ft above sea level, from topographic map. From Feb. 24 to Aug. 2, 2000, at site 0.5 mi upstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated by Cherry Creek Lake (see station 06712990). Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	4.2	16	23	20	e18	22	6.4	3.7	e6.0	0.58	3.1
2	8.0	4.2	16	22	20	e20	22	6.7	3.7	e5.3	0.67	2.8
3	7.6	4.2	17	22	20	e23	22	6.5	21	e4.4	0.50	3.7
4	7.4	4.2	20	22	17	e29	22	6.3	88	e4.0	3.4	3.2
5	11	4.3	27	22	6.4	24	22	6.6	15	19	5.8	2.6
6	7.2	4.5	28	21	5.5	22	22	6.6	13	66	2.7	2.5
7	6.8	5.9	29	23	5.2	22	22	6.5	13	e7.9	2.0	2.4
8	6.7	15	30	22	20	21	22	6.2	14	e4.1	1.8	2.3
9	6.8	4.6	31	22	21	25	22	6.1	15	e3.6	1.7	2.7
10	6.2	4.3	29	28	21	22	22	6.3	15	22	1.3	12
11	6.0	4.2	13	23	22	21	25	7.3	15	4.3	0.76	4.3
12	6.1	4.2	27	21	22	23	21	11	15	1.8	0.76	50
13	5.6	4.2	17	21	22	30	18	7.1	15	1.4	0.76	52
14	5.5	4.2	15	21	23	38	18	6.9	15	0.85	0.82	12
15	7.0	4.4	23	21	23	36	18	6.7	15	0.66	0.89	9.1
16	5.2	4.1	27	21	23	31	18	12	15	0.66	1.3	8.6
17	5.1	4.1	27	21	23	30	18	10	15	0.57	1.6	8.8
18	4.9	5.6	24	e21	23	33	18	6.4	15	0.46	1.7	29
19	4.7	5.0	23	e21	23	32	19	6.2	18	0.46	1.7	17
20	4.6	4.1	23	e23	21	30	10	6.1	25	0.32	1.7	9.1
21	4.7	4.1	23	e22	21	30	7.2	6.0	10	0.44	3.0	7.0
22	4.5	4.7	24	20	22	30	6.8	5.9	14	4.2	4.6	6.8
23	4.3	36	23	22	22	29	6.7	11	e4.8	1.4	2.4	6.7
24	4.2	8.6	23	e20	22	29	6.5	96	e4.1	1.2	2.0	6.8
25	4.5	7.5	23	24	23	29	6.4	12	e3.9	0.71	1.7	6.9
26	4.4	11	23	22	22	29	6.6	6.1	e7.3	0.70	1.7	11
27	4.4	13	23	21	21	28	6.7	4.4	e4.9	1.3	3.0	8.5
28	4.2	14	23	20	22	22	6.8	3.9	e4.7	0.70	2.6	15
29	4.2	15	22	20	---	22	6.6	3.8	e5.7	0.67	66	17
30	4.3	16	22	20	---	22	6.4	3.8	e6.2	0.72	10	17
31	4.5	---	22	20	---	23	---	3.7	---	0.61	3.9	---
TOTAL	179.0	229.4	713	672	556.1	823	469.7	300.5	430.0	166.43	133.34	339.9
MEAN	5.77	7.65	23.0	21.7	19.9	26.5	15.7	9.69	14.3	5.37	4.30	11.3
MAX	11	36	31	28	23	38	25	96	88	66	66	52
MIN	4.2	4.1	13	20	5.2	18	6.4	3.7	3.7	0.32	0.50	2.3
AC-FT	355	455	1410	1330	1100	1630	932	596	853	330	264	674

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2002, BY WATER YEAR (WY)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	15.0	13.9	13.1	14.8	19.6	30.6	43.5	47.5	37.3	28.2	28.3	19.4						
MAX	38.0	33.8	29.8	45.7	53.2	75.2	104	147	101	55.9	72.0	43.0						
(WY)	1986	1998	1988	1985	1988	1985	1998	1999	1999	1995	1998	1995						
MIN	4.65	4.42	1.94	3.01	3.46	4.41	9.81	9.69	13.7	5.37	4.30	3.90						
(WY)	1995	1995	1995	1995	1990	1995	1991	2002	1990	2002	2002	1994						

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1985 - 2002

ANNUAL TOTAL	11772.4	5012.37	
ANNUAL MEAN	32.3	13.7	25.4
HIGHEST ANNUAL MEAN			46.8
LOWEST ANNUAL MEAN			10.9
HIGHEST DAILY MEAN	413	Jul 8	96
LOWEST DAILY MEAN	4.1	Nov 16	0.32
ANNUAL SEVEN-DAY MINIMUM	4.2	Nov 11	0.51
MAXIMUM PEAK FLOW			647
MAXIMUM PEAK STAGE			6.78
ANNUAL RUNOFF (AC-FT)	23350	9940	18420
10 PERCENT EXCEEDS	67	25	57
50 PERCENT EXCEEDS	22	11	15
90 PERCENT EXCEEDS	5.6	1.8	4.2

e Estimated.

a From rating curve extended above 800 ft³/s.

b Also occurred Jul 28, 1997.

06713500 CHERRY CREEK AT DENVER, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1993 to July 1995, February 2001 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April to September 2002.
WATER TEMPERATURE: April to September 2002.

INSTRUMENTATION.--Water-quality monitor from April to September 2002.

REMARKS.--Daily specific conductance record is excellent except for May 8-29, which is good, Sept. 23-29, which is fair, and May 29 to June 6, Aug. 27 to Sept. 2, which are poor. Daily water temperature record is excellent. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR CURRENT YEAR.--(during period April to September)

SPECIFIC CONDUCTANCE: Maximum, 1360 microsiemens/cm, May 1-2 and Sept. 5-6; minimum, 174 microsiemens/cm, July 10.
WATER TEMPERATURE: Maximum, 29.0°C, July 8; minimum, 7.9°C, Apr. 25.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (000061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (000095)	PH WATER WHOLE FIELD (STAND-ARD (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	BICAR-BONATE WATER DIS IT (MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CACO3 (39086)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SILICA, DIS-SOLVED (MG/L AS SI02) (00955)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
OCT													
10...	1004	--	--	--	--	--	--	--	--	--	--	--	--
10...	1005	12	977	8.5	12.7	12.0	224	198	--	--	--	--	209
15...	1009	--	--	--	--	--	--	--	--	--	--	--	--
15...	1010	15	866	7.1	12.0	12.5	--	--	--	--	--	--	--
NOV													
05...	1036	--	--	--	--	--	--	--	--	--	--	--	--
05...	1105	12	1080	8.7	14.6	11.3	246	221	--	--	--	--	233
20...	1039	--	--	--	--	--	--	--	--	--	--	--	--
20...	1040	12	1160	8.5	9.6	12.9	--	--	--	--	--	--	--
DEC													
04...	1039	--	--	--	--	--	--	--	--	--	--	--	--
04...	1040	18	1100	8.4	7.8	12.5	249	212	--	--	--	--	241
18...	1045	23	1190	7.9	5.1	12.4	--	--	--	--	--	--	--
JAN													
09...	1019	--	--	--	--	--	--	--	--	--	--	--	--
09...	1020	22	1120	7.9	6.5	11.2	224	184	--	--	--	--	230
24...	1100	29	1290	8.4	1.5	12.8	--	--	--	--	--	--	--
FEB													
07...	1104	--	--	--	--	--	--	--	--	--	--	--	--
07...	1105	11	1150	8.8	6.9	13.5	336	311	--	--	--	--	248
21...	1005	26	1010	8.4	5.5	12.4	--	--	--	--	--	--	--
MAR													
04...	1024	--	--	--	--	--	--	--	--	--	--	--	--
04...	1025	29	1760	8.7	2.5	12.5	201	187	--	--	--	--	204
20...	1024	--	--	--	--	--	--	--	--	--	--	--	--
20...	1025	38	1020	8.6	7.9	11.7	--	--	--	--	--	--	--
APR													
02...	0954	--	--	--	--	--	--	--	--	--	--	--	--
02...	0955	27	983	8.6	6.1	12.1	203	187	--	--	--	--	205
11...	0950	46	930	8.4	11.1	10.0	--	--	--	--	--	--	--
22...	0950	11	1100	8.5	11.2	11.4	--	--	--	--	--	--	--
MAY													
08...	1024	--	--	--	--	--	--	--	--	--	--	--	--
08...	1025	14	1080	8.6	17.2	9.2	275	228	--	--	--	--	190
20...	1030	12	1030	8.1	13.7	9.0	--	--	--	--	--	--	--
29...	0950	12	1080	8.4	18.2	8.6	--	--	--	--	--	--	--
JUN													
06...	0849	--	--	--	--	--	--	--	--	--	--	--	--
06...	0850	17	1070	8.3	16.2	11.7	264	216	--	--	--	--	201
17...	1020	27	1050	8.8	19.2	13.9	--	--	--	--	--	--	--
27...	1020	11	1060	8.3	22.4	9.8	--	--	--	--	--	--	--
JUL													
09...	0929	--	--	--	--	--	--	--	--	--	--	--	--
09...	0930	17	1060	8.5	25.0	9.2	236	209	--	--	--	--	202
19...	1040	10	1030	8.8	22.0	11.3	--	--	--	--	--	--	--
29...	1030	10	1050	8.5	21.0	10.4	--	--	--	--	--	--	--
AUG													
05...	1359	--	--	--	--	--	--	--	--	--	--	--	--
05...	1400	12	1040	8.6	27.5	8.5	230	208	104	17.3	21.2	85.4	185
15...	1040	E10	1040	8.7	20.5	11.5	--	--	--	--	--	--	--
27...	0930	7.1	959	8.4	17.9	8.6	--	--	--	--	--	--	--
SEP													
05...	0939	--	--	--	--	--	--	--	--	--	--	--	--
05...	0940	9.0	1030	8.5	18.0	10.4	259	214	106	17.8	20.3	84.9	176
23...	0950	13	1060	8.3	14.0	9.4	--	--	--	--	--	--	--

E Estimated laboratory analysis value.

PLATTE RIVER BASIN

06713500 CHERRY CREEK AT DENVER, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	NITRO- GEN, NITRITE SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, INOR- GANIC, PARTIC- ULATE TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)
OCT													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	75.3	--	--	.018	2.11	<.04	.38	.24	.19	5.9	<.1	.6	.6
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	.047	1.95	.43	1.6	.41	.29	--	--	--	--
NOV													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	86.0	--	--	.032	2.73	<.04	.52	.25	.20	6.2	--	--	.8
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	98.3	--	--	.013	1.81	E.02	.49	.20	.17	4.4	--	--	.9
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	124	--	--	.011	1.46	E.03	.70	2.96	.11	6.3	--	--	2.2
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	103	--	--	.023	3.17	<.04	.35	.23	.18	3.1	--	--	.8
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	333	--	--	.019	1.43	E.03	.84	.192	.09	5.5	<.1	2.4	2.4
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	.008	.78	<.04	.71	.147	.06	--	--	--	--
APR													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	84.0	--	--	.060	.83	<.04	.63	.170	.08	4.7	<.1	2.9	2.9
11...	--	--	--	.022	.77	.18	1.4	.22	.10	--	--	--	--
22...	--	--	--	.030	1.90	<.04	.39	.163	.12	--	--	--	--
MAY													
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	86.8	--	--	.028	3.01	E.03	.51	.21	.18	3.1	<.1	.7	.7
20...	--	--	--	.029	2.35	<.04	.38	.197	.10	--	--	--	--
29...	--	--	--	.014	2.79	<.04	.28	.195	.15	--	--	--	--
JUN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	84.5	--	--	.031	2.54	.07	.37	.199	.14	3.7	<.1	.6	.6
17...	--	--	--	.017	1.50	<.04	.43	.135	.09	--	--	--	--
27...	--	--	--	.035	2.81	<.04	.32	.23	.20	--	--	--	--
JUL													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	82.9	--	--	.188	2.98	<.04	.30	.23	.22	3.2	<.1	.3	.3
19...	--	--	--	.029	2.56	<.04	.39	.147	.09	--	--	--	--
29...	--	--	--	.028	3.27	<.04	.42	.189	.15	--	--	--	--
AUG													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	83.0	<10	18.9	.046	2.99	E.02	.51	.28	.22	4.6	<.1	1.2	1.2
15...	--	--	--	.025	3.23	<.04	.44	.20	.15	--	--	--	--
27...	--	--	--	.029	3.04	<.04	.34	.22	.19	--	--	--	--
SEP													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	83.2	E8	13.7	.018	3.66	<.04	.29	.22	.19	2.9	<.1	.3	.3
23...	--	--	--	.019	2.69	<.04	.24	.23	.20	--	--	--	--

E Estimated laboratory analysis value.

06713500 CHERRY CREEK AT DENVER, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NITRO- GEN, PAR TICULTE WAT FLT SUSP (MG/L AS N) (49570)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	DEETHYL ATRA- ZINE, WATER, DISS, REC, (UG/L) (04040)	ATRA- ZINE, WATER, DISS, REC, (UG/L) (39632)	METHYL AZIN- PHOS WAT FLT GF, REC (UG/L) (82686)	BEN- FLUR- ALIN WAT FLD GF, REC (UG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)
OCT													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	.08	<.004	<.002	<.03	E.004	<.050	<.010	<.002	E.044	<.020	<.005	<.018	<.003
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	<.004	<.002	<.03	<.009	<.050	<.010	<.002	E.543	<.020	<.030	<.018	<.003
NOV													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	.03	<.004	<.002	<.006	E.005	<.050	<.010	<.002	E.009	<.020	<.005	<.018	<.003
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	<.004	<.002	<.03	E.003	<.050	<.010	<.002	E.013	<.020	<.005	<.018	<.003
DEC													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	.06	<.004	<.002	<.03	E.004	<.050	<.010	<.002	E.007	<.020	<.005	<.018	<.003
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	.21	<.004	<.002	E.002	.008	<.050	<.010	<.002	<.041	<.020	<.005	<.018	<.003
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	.09	<.006	<.004	E.004	<.007	<.050	<.010	<.002	<.041	<.020	<.005	<.018	<.003
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	.21	<.006	<.004	E.005	.012	<.050	<.010	<.002	E.022	<.020	<.005	<.018	<.003
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	<.006	<.004	<.006	.009	<.050	<.010	<.002	<.041	<.020	<.005	<.018	<.003
APR													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	.36	<.006	<.004	<.006	.016	<.050	<.010	<.002	<.041	<.020	<.005	<.018	<.003
11...	--	<.006	<.004	<.006	.009	<.050	E.003	<.002	E.139	<.020	<.005	<.018	.004
22...	--	<.006	<.004	E.004	.007	<.050	<.010	<.002	E.020	<.020	<.005	<.018	<.003
MAY													
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	.08	<.006	<.004	E.004	E.002	<.050	<.010	<.002	E.031	<.020	<.005	<.018	<.003
20...	--	<.006	<.004	<.006	.012	<.050	<.010	<.002	E.030	<.020	<.005	<.018	<.003
29...	--	<.006	<.007	E.007	.016	<.050	<.010	<.002	E.057	<.020	<.005	<.018	<.003
JUN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	.09	<.006	<.004	<.008	.016	<.050	<.010	<.002	E.260	<.020	<.005	<.018	.003
17...	--	<.006	<.004	<.006	.013	<.050	<.010	<.002	E.015	<.020	<.005	<.018	<.003
27...	--	<.006	<.004	E.005	.013	<.050	<.010	<.002	E.098	<.020	<.005	<.018	<.003
JUL													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	.03	<.006	<.004	E.004	.008	<.050	<.010	<.002	E.017	<.020	<.005	<.018	<.003
19...	--	<.006	<.004	<.006	E.006	<.050	<.010	<.002	E.029	<.020	<.005	<.018	<.003
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	.18	<.006	<.004	<.006	.010	<.050	<.010	<.002	E.064	<.020	<.005	<.018	<.003
15...	--	<.006	<.004	<.006	E.006	<.050	<.010	<.002	E.127	<.020	<.005	<.018	<.003
27...	--	<.006	<.004	E.005	E.007	<.050	<.010	<.002	E.024	<.020	<.005	<.018	<.003
SEP													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	.05	<.006	<.004	E.004	.007	<.050	<.010	<.002	E.016	<.020	<.005	<.018	<.003
23...	--	<.006	<.004	E.004	.009	<.050	<.010	<.002	E.006	<.020	<.005	<.018	<.003

E Estimated laboratory analysis value.

PLATTE RIVER BASIN

06713500 CHERRY CREEK AT DENVER, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	P,P' DDE (UG/L) (34653)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U (UG/L) (82660)	DISUL- FOTON WATER FLTRD 0.7 U (UG/L) (82677)	EPTC WATER FLTRD 0.7 U (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U (UG/L) (82672)	FONOFOS WATER REC (UG/L) (04095)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U (UG/L) (82666)	MALA- THON, DIS- SOLVED (UG/L) (39532)
OCT													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	<.003	E.004	<.005	<.002	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	<.003	.464	<.005	<.002	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
NOV													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	<.003	.238	<.005	<.002	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	<.003	E.005	<.005	<.002	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
DEC													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	<.003	E.003	<.005	<.002	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	<.003	<.005	<.005	<.002	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	<.003	<.005	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	<.003	<.005	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	<.004	<.005	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
APR													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	<.003	<.005	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
11...	<.003	.061	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
22...	<.003	.008	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
MAY													
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	<.003	.008	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
20...	<.003	.007	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
29...	<.003	.006	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
JUN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	<.003	.021	<.005	<.006	<.02	.003	<.009	<.005	<.003	<.005	<.004	<.035	<.027
17...	<.003	E.005	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
27...	<.003	.020	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
JUL													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	<.003	E.004	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
19...	<.003	.007	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	<.003	.007	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
15...	<.003	<.005	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
27...	<.003	<.005	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
SEP													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	<.003	E.004	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
23...	<.003	<.005	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027

E Estimated laboratory analysis value.

PLATTE RIVER BASIN

06713500 CHERRY CREEK AT DENVER, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)
OCT													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	<.006	<.013	<.006	<.002	<.007	<.007	<.002	<.010	<.006	<.011	.03	<.004	<.010
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	<.006	<.013	<.006	<.002	<.007	<.007	<.002	<.010	<.006	<.011	.03	<.004	<.010
NOV													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	<.006	<.013	<.006	<.002	<.007	<.007	<.002	<.010	<.006	<.011	.04	<.004	<.010
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	<.006	<.013	<.006	<.002	<.007	<.007	<.002	<.010	<.006	<.011	.05	<.004	<.010
DEC													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	<.006	<.013	<.006	<.002	<.007	<.007	<.002	<.010	<.006	<.011	.04	<.004	<.010
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	<.006	<.013	<.006	<.002	<.007	<.007	<.002	<.010	<.006	<.011	.03	<.004	<.010
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	<.006	<.013	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.05	<.004	<.010
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	<.006	<.013	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.04	<.004	<.010
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	<.006	<.013	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.03	<.004	<.010
APR													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	<.006	<.013	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	<.01	<.004	<.010
11...	<.006	E.007	<.006	<.002	<.007	<.010	<.004	.048	<.006	<.011	.02	<.004	<.010
22...	<.006	<.013	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.05	<.004	<.010
MAY													
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	<.006	<.013	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.05	<.004	<.010
20...	<.006	<.013	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.05	<.004	<.010
29...	<.006	E.004	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.07	<.004	<.010
JUN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	<.006	E.009	<.006	<.002	<.007	<.010	<.004	.022	.022	<.011	.06	<.004	<.010
17...	<.006	<.013	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.04	<.004	<.010
27...	<.006	<.013	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.06	<.004	<.010
JUL													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	<.006	<.013	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.05	<.004	<.010
19...	<.006	<.013	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.21	<.004	<.010
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	<.006	<.013	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.05	<.004	<.010
15...	<.006	<.013	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.07	<.004	<.010
27...	<.006	<.013	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.05	<.004	<.010
SEP													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	<.006	<.013	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.05	<.004	<.010
23...	<.006	<.013	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.04	<.004	<.010

E Estimated laboratory analysis value.

PLATTE RIVER BASIN

06713500 CHERRY CREEK AT DENVER, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	2,4-D, DIS- SOLVED REC (UG/L) (39732)	2,4-DB WATER, FLTRD, GF 0.7U REC (UG/L) (38746)	2,4-D METHYL ESTER, WATER, FLTRD REC (UG/L) (50470)	HYDROXY ATRA- ZINE WATER FLTRD REC (UG/L) (50355)
OCT													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	<.011	<.02	E.006	E.003	<.034	<.02	<.005	<.002	<.009	.23	<.02	<.009	<.008
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	<.011	<.16	<.011	<.006	<.034	<.02	<.005	<.002	<.009	E1.03	<.02	<.009	<.008
NOV													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	<.011	<.02	<.011	E.01	<.034	<.02	<.005	<.002	<.009	<.02	<.02	<.009	<.008
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	<.011	<.02	E.006	E.004	<.034	<.02	<.005	<.002	<.009	<.02	<.02	<.009	<.008
DEC													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	<.011	<.02	E.006	.007	<.034	<.02	<.005	<.002	<.009	.03	<.02	<.009	<.008
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	<.011	<.02	<.011	<.02	<.034	<.02	<.005	<.002	<.009	.03	<.02	<.009	<.008
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	<.011	<.02	<.020	E.01	<.034	<.02	<.005	<.002	<.009	<.02	<.02	<.009	<.008
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	<.011	<.02	<.010	<.02	<.034	<.02	<.005	<.002	<.009	.05	<.02	<.009	<.008
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009	<.02	<.02	<.009	<.008
APR													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009	.03	<.02	<.009	<.008
11...	<.011	<.02	<.015	<.02	<.034	<.02	<.005	<.002	E.002	.57	<.02	<.009	<.008
22...	<.011	<.02	.007	E.01	<.034	<.02	<.005	<.002	<.009	.18	<.02	<.009	<.008
MAY													
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	<.011	<.18	.007	E.01	<.034	<.02	<.005	<.002	<.009	.44	<.02	<.009	<.008
20...	<.011	<.02	.007	<.02	<.034	<.02	<.005	<.002	<.009	.13	<.02	<.009	<.008
29...	<.011	<.02	.009	<.02	<.034	<.02	<.005	<.002	<.009	.08	<.02	<.009	<.008
JUN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	<.011	<.02	<.015	<.02	<.034	<.02	<.005	<.002	<.009	.10	<.02	<.009	<.008
17...	<.011	<.02	.006	<.02	<.034	<.02	<.005	<.002	<.009	.12	<.02	<.009	<.008
27...	<.011	<.02	.008	<.02	<.034	<.02	<.005	<.002	<.009	.07	<.02	<.009	<.008
JUL													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	<.011	<.02	.007	<.02	<.034	<.02	<.005	<.002	<.009	.09	<.02	<.009	<.008
19...	<.011	<.02	.007	<.02	<.034	<.02	<.005	<.002	<.009	.08	<.02	<.009	<.008
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	<.011	<.02	.008	<.02	<.034	<.02	<.005	<.002	<.009	.12	<.02	<.009	<.008
15...	<.011	<.02	.007	E.01	<.034	<.02	<.005	<.002	<.009	.05	<.02	<.009	<.008
27...	<.011	<.02	.008	<.02	<.034	<.02	<.005	<.002	<.009	.04	<.02	<.009	<.008
SEP													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	<.011	<.02	.007	E.01	<.034	<.02	<.005	<.002	<.009	.04	<.02	<.009	<.008
23...	<.011	<.02	.007	<.02	<.034	<.02	<.005	<.002	<.009	<.02	<.02	<.009	<.008

E Estimated laboratory analysis value.

06713500 CHERRY CREEK AT DENVER, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	UREA 3(4-CHLOROPHENYL METHYL WAT REC (UG/L) (61692)	3HYDRXY CARBO-FURAN GF 0.7U REC (UG/L) (49308)	3-KETO CARBO-FURAN FLTRD REC (UG/L) (50295)	ACIFL-UORFEN WATER, FLTRD GF 0.7U REC (UG/L) (49315)	ALDI-CARB, WATER, FLTRD GF 0.7U REC (UG/L) (49312)	ALDI-CARB SULFONE WAT, FLT GF 0.7U REC (UG/L) (49313)	ALDICA-RB SULFOXIDE, WAT, FLT GF 0.7U REC (UG/L) (49314)	BENDIO-CARB, WATER, FLTRD REC (UG/L) (50299)	BENOMYL WATER, FLTRD REC (UG/L) (50300)	BEN-SUL-FURON METHYL WAT REC (UG/L) (61693)	BENTA-ZON, WATER, FLTRD GF 0.7U REC (UG/L) (38711)	BRO-MACIL, WATER, DISS, REC (UG/L) (04029)	BRO-MOXYNIL WATER, FLTRD GF 0.7U REC (UG/L) (49311)
OCT													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	<.02	<.006	<2	<.007	<.04	<.02	<.008	<.03	<.004	<.02	<.01	<.03	<.02
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	<.02	<.006	<2	<.007	<.04	<.02	<.008	<.03	<.004	<.02	<.01	<.03	<.02
NOV													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	<.02	<.006	<2	<.007	<.04	<.02	<.008	<.03	<.004	<.02	<.01	<.03	<.02
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	<.02	<.006	<2	<.007	<.04	<.02	<.008	<.03	<.004	<.02	<.01	<.03	<.02
DEC													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	<.02	<.006	<2	<.007	<.04	<.02	<.008	<.03	<.004	<.02	<.01	<.03	<.02
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	<.02	<.006	<2	<.007	<.04	<.02	<.008	<.03	E.540	<.02	<.01	<.03	<.02
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	<.02	<.006	<2	<.007	<.04	<.02	<.008	<.03	<.004	<.02	<.01	<.03	<.02
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	<.02	<.006	<2	<.007	<.04	<.02	<.008	<.03	<.004	<.02	<.01	<.03	<.02
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	<.02	<.006	<2	<.200	<.04	<.02	<.008	<.03	<.004	<.02	<.01	<.03	<.02
APR													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	<.02	<.006	<2	<.007	<.04	<.02	<.008	<.03	<.004	<.02	M	<.03	<.02
11...	<.02	<.006	<2	<.007	<.04	E.16	<.008	<.03	<.004	<.02	<.01	<.03	<.02
22...	<.02	<.006	<2	<.007	<.04	<.02	<.008	<.03	<.004	<.02	<.01	<.03	<.02
MAY													
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	<.02	<.006	<2	<.007	<.04	<.02	<.008	<.03	.129	<.02	<.01	<.03	<.02
20...	<.02	<.006	<2	<.007	<.04	<.02	<.008	<.03	.033	<.02	<.01	<.03	<.02
29...	<.02	<.006	<2	<.007	<.04	<.02	<.008	<.03	.012	<.02	<.01	<.03	<.02
JUN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	<.02	<.006	<2	<.007	<.04	<.02	<.008	<.03	.009	<.02	<.01	<.03	<.02
17...	<.02	<.006	<2	<.007	<.04	<.02	<.008	<.03	<.004	<.02	<.01	<.03	<.02
27...	<.02	<.006	<2	<.007	<.04	<.02	<.008	<.03	.012	<.02	<.01	<.03	<.02
JUL													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	<.02	<.006	<2	<.007	<.04	<.02	<.008	<.03	.015	<.02	<.01	<.03	<.02
19...	<.02	<.006	<2	<.007	<.04	<.02	<.008	<.03	.023	<.02	<.01	E.03	<.02
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	<.02	<.006	<2	<.007	<.04	<.02	<.008	<.03	E.082	<.02	<.01	<.03	<.02
15...	<.02	<.006	<2	<.007	<.04	<.02	<.008	<.03	<.004	<.02	<.01	<.03	<.02
27...	<.02	<.006	<2	<.007	<.04	<.02	<.008	<.03	<.004	<.02	<.01	<.03	<.02
SEP													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	<.02	<.006	<2	<.007	<.04	<.02	<.008	<.03	.018	<.02	<.01	<.03	<.02
23...	<.02	<.006	<2	<.007	<.04	<.02	<.008	<.03	<.004	<.02	<.01	<.03	<.02

E Estimated laboratory analysis value.
M Presence of material verified but not quantified.

PLATTE RIVER BASIN

06713500 CHERRY CREEK AT DENVER, CO--Continued
 (National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	CAF- FEINE, WATER FLTRD REC (UG/L) (50305)	CHLOR- AMBEN, METHYL ESTER WATER FLTRD REC (UG/L) (61188)	CHLORI- MURON, WATER FLTRD REC (UG/L) (50306)	CHLORO- THALO- NIL, WAT,FLT GF 0.7U REC (UG/L) (49306)	CLOPYR- ALID, WATER, FLTRD, GF 0.7U REC (UG/L) (49305)	CY- CLOATE, WATER, DISS, GF 0.7U REC (UG/L) (04031)	DACTHAL MONO- ACID, WAT,FLT GF 0.7U REC (UG/L) (49304)	DEISO- PROPYL ATRAZIN WATER, FLTRD, DISS, GF 0.7U REC (UG/L) (04038)	DICAMBA WATER, FLTRD, GF 0.7U REC (UG/L) (38442)	DICHLOR PROP, WATER, FLTRD, GF 0.7U REC (UG/L) (49302)	DEETHYL DEISO- PROPYL ATRAZIN WATER, FLTRD, DISS, GF 0.7U REC (UG/L) (04039)	DINOSEB WATER, FLTRD, GF 0.7U REC (UG/L) (49301)	DIPHEN- AMID, WATER, DISS, REC (UG/L) (04033)
OCT													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	E1.81	<.02	<.010	<.04	.02	<.005	<.01	<.04	<.01	<.01	<.01	<.01	<.03
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	.984	<.02	<.010	<.04	<.01	<.005	<.01	<.04	<.01	<.01	<.01	<.01	<.03
NOV													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	E.505	<.02	<.010	<.04	<.01	<.01	<.01	<.04	<.01	<.01	<.01	<.01	<.03
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	E3.15	<.02	<.010	<.04	<.01	<.01	<.01	<.04	<.01	<.01	M	<.01	<.03
DEC													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	E1.34	<.02	<.010	<.04	<.01	<.01	<.01	<.04	<.01	<.01	E.01	<.01	<.03
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	E.289	<.02	<.010	<.04	<.01	<.01	<.01	<.04	<.01	<.01	<.01	<.01	E.01
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	E1.06	<.02	<.010	<.04	<.01	<.01	<.01	<.04	<.01	<.01	<.01	<.01	<.03
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	E1.08	<.02	<.010	<.04	<.01	<.01	<.01	<.04	<.01	<.01	<.01	<.01	<.03
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	.272	<.02	<.010	<.04	<.01	<.01	<.01	<.04	<.01	<.01	<.01	<.01	<.03
APR													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	.436	<.02	<.010	<.04	<.01	<.01	--	<.04	<.01	<.01	<.01	<.01	<.03
11...	E3.50	<.02	<.010	<.04	<.01	<.01	<.01	<.04	<.01	<.01	<.01	<.01	<.03
22...	.792	<.02	<.010	<.04	<.01	<.01	<.01	<.04	<.01	<.01	<.01	<.01	<.03
MAY													
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	E1.41	<.02	<.010	<.04	.04	<.01	<.01	<.04	.09	.02	<.0024	<.01	<.03
20...	.426	<.02	<.010	<.04	.04	<.01	<.01	<.04	<.01	<.01	<.01	<.01	<.03
29...	.648	<.02	<.010	<.04	<.01	<.01	<.01	<.04	<.01	<.01	<.01	<.01	<.03
JUN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	.367	<.02	<.010	<.04	<.01	<.01	<.01	<.04	<.01	<.01	<.01	<.01	<.03
17...	E1.39	<.02	<.010	<.04	<.01	<.01	<.01	<.04	<.01	<.01	<.01	<.01	<.03
27...	.588	<.02	<.010	<.04	<.01	<.01	<.01	<.04	<.01	<.01	<.01	<.01	<.03
JUL													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	.192	<.02	<.010	<.04	<.01	<.01	<.01	<.04	<.01	<.01	<.01	<.01	<.03
19...	E1.48	<.02	<.010	<.04	<.01	<.01	<.01	<.04	<.01	<.01	<.01	<.01	<.03
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	E4.24	<.02	<.010	<.04	<.01	<.01	<.01	<.04	<.01	<.01	<.01	<.01	<.03
15...	E1.63	<.02	<.010	<.04	<.01	<.01	<.01	<.04	<.01	<.01	<.01	<.01	<.03
27...	.846	<.02	<.010	<.04	<.01	<.01	<.01	<.04	<.01	<.01	<.01	<.01	<.03
SEP													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	E1.65	<.02	<.010	<.04	<.01	<.01	<.01	<.04	<.01	.02	<.01	<.01	<.03
23...	E.611	<.02	<.010	<.04	<.01	<.01	<.01	<.04	<.01	<.01	E.01	<.01	<.03

E Estimated laboratory analysis value.
 M Presence of material verified but not quantified.

06713500 CHERRY CREEK AT DENVER, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	DIURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49300)	FEN- URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49297)	FLUMET- SULAM WATER FLTRD REC (UG/L) (61694)	FLUO- METURON WATER, FLTRD, GF 0.7U REC (UG/L) (38811)	IMAZ- AQUIN WATER FLTRD REC (UG/L) (50356)	IMAZE- THAPYR WATER FLTRD REC (UG/L) (50407)	IMID- ACLOP- RID WATER FLTRD REC (UG/L) (61695)	MCPA, WATER, FLTRD, GF 0.7U REC (UG/L) (38482)	MCPB, WATER, FLTRD, GF 0.7U REC (UG/L) (38487)	METAL- AXYL WATER FLTRD REC (UG/L) (50359)	METHIO- CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (38501)	METH- OMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49296)	METH- OMYL OXIME WATER FLTRD REC (UG/L) (61696)
OCT													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	E.01	<.03	<.01	<.03	E.02	<.02	<.007	E.01	<.01	<.02	<.008	E.003	<.01
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	<.01	<.03	<.01	<.03	E1.94	<.02	<.007	.16	<.01	<.02	<.008	<.004	<.01
NOV													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	<.01	<.03	<.01	<.03	<.02	<.02	<.007	.04	<.01	<.02	<.008	<.004	<.01
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	E.01	<.03	<.01	<.03	<.02	<.02	<.007	<.02	<.01	<.02	<.008	<.004	<.01
DEC													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	E.01	<.03	<.01	<.03	E.04	<.02	<.007	<.02	<.01	<.02	<.008	<.004	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	E.01	<.03	<.01	<.03	E.07	<.02	<.007	<.02	<.01	<.02	<.008	<.004	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	E.01	<.03	<.01	<.03	<.02	E.01	<.007	<.02	<.01	<.02	<.008	<.004	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	.03	<.03	<.01	<.03	E2.00	<.02	<.007	<.02	<.01	E.01	<.008	<.004	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	.02	<.03	<.01	<.03	<.02	E.12	<.007	<.20	<.01	<.02	<.008	<.004	--
APR													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	.02	<.03	<.01	<.03	E.03	<.02	<.007	<.02	<.01	<.02	<.008	<.004	--
11...	.05	<.03	<.01	<.03	<.02	<.02	<.007	<.02	<.01	<.02	<.008	<.004	--
22...	E.01	<.03	<.01	<.03	E.04	<.02	<.007	<.02	<.01	<.02	<.008	<.004	--
MAY													
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	E.01	<.03	<.01	<.03	<.02	<.02	<.007	<.02	<.01	E.02	<.008	<.004	--
20...	E.01	<.03	<.01	<.03	<.02	<.02	<.007	.02	<.01	<.02	<.008	<.004	--
29...	.05	<.03	<.01	<.03	E.07	<.02	<.007	<.02	<.01	<.02	<.008	<.004	--
JUN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	E.06	<.03	<.01	<.03	<.02	<.02	<.007	<.02	<.01	<.02	<.008	<.004	--
17...	<.01	<.03	<.01	<.03	<.02	<.02	<.007	<.02	<.01	<.02	<.008	<.004	--
27...	E.01	<.03	<.01	<.03	<.02	<.02	<.007	.03	<.01	<.02	<.008	<.004	--
JUL													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	.03	<.03	<.01	<.03	<.02	<.02	<.007	<.02	<.01	<.02	<.008	<.004	--
19...	E.01	<.03	<.01	<.03	<.02	<.02	<.007	<.02	<.01	<.02	<.008	<.004	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	<.01	<.03	<.01	<.03	<.02	<.02	<.007	<.02	<.01	E.01	<.008	<.004	--
15...	<.01	<.03	<.01	<.03	<.02	<.02	<.007	<.02	<.01	E.01	<.008	<.004	--
27...	<.01	<.03	<.01	<.03	<.02	--	<.007	<.02	<.01	<.02	<.008	<.004	--
SEP													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	<.01	<.03	<.01	<.03	<.02	<.02	<.007	E.01	<.01	<.02	<.008	<.004	--
23...	E.01	<.03	<.01	<.03	<.02	<.02	<.007	<.02	<.01	<.02	<.008	<.004	--

E Estimated laboratory analysis value.

PLATTE RIVER BASIN

06713500 CHERRY CREEK AT DENVER, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	MET-SUL-FURON METHYL WAT FLT REC (UG/L) (61697)	NEB-URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49294)	NICOSUL FURON WATER FLTRD REC (UG/L) (50364)	NORFLUR AZON, WATER, FLTRD, GF 0.7U REC (UG/L) (49293)	ORY-ZALIN, WATER, FLTRD, GF 0.7U REC (UG/L) (49292)	OXAMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (38866)	OXAMYL OXIME WATER FLTRD REC (UG/L) (50410)	PIC-LORAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49291)	PRO-PHAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49236)	PROP-ICONA-ZOLE, WATER, FLTRD, GF 0.7U REC (UG/L) (50471)	PRO-POXUR, WATER, FLTRD, GF 0.7U REC (UG/L) (38538)	SIDURON WATER FLTRD REC (UG/L) (38548)	SULFO-MET-RURON METHYL WTR FLT REC (UG/L) (50337)
OCT													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	E.07	<.01	<.01	<.02	<.02	<.01	<.01	<.02	<.010	<.02	<.008	<.02	<.009
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	E1.09	<.01	<.01	<.02	<.02	<.01	<.01	<.02	<.010	<.02	<.008	<.02	<.009
NOV													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	<.03	<.01	<.01	<.02	<.02	<.01	<.01	<.02	<.010	<.02	<.008	<.02	<.009
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	<.03	<.01	<.01	<.02	<.02	<.01	<.01	<.02	<.010	<.02	<.008	<.02	<.009
DEC													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	E.09	<.01	<.01	<.02	<.02	<.01	--	<.02	<.010	<.02	<.008	<.02	<.009
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	<.03	<.01	<.01	<.02	<.02	<.01	--	<.02	<.010	<.02	<.008	<.02	<.009
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	E.07	<.01	<.01	<.02	<.02	<.01	--	<.02	<.010	<.02	<.008	<.02	<.009
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	E.32	<.01	<.01	<.02	<.02	<.01	--	<.02	<.010	<.02	<.008	<.02	<.009
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	<.03	<.01	<.01	<.02	<.02	<.01	--	<.02	<.010	<.02	<.008	<.02	<.009
APR													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	E.22	<.01	<.01	<.02	<.02	<.01	--	<.02	<.010	<.02	<.008	<.02	<.009
11...	<.03	<.01	<.01	<.02	<.02	<.01	--	<.02	<.010	<.02	<.008	<.02	<.009
22...	<.03	<.01	<.01	<.02	<.02	<.01	--	<.02	<.010	<.02	<.008	<.02	<.009
MAY													
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	<.03	<.01	<.01	<.02	<.02	<.01	--	<.02	<.010	<.02	<.008	<.02	<.009
20...	<.03	<.01	<.01	<.02	<.02	<.01	--	<.02	<.010	<.02	E.005	<.02	<.009
29...	E.44	<.01	<.01	<.02	<.02	<.01	--	<.02	<.010	<.02	<.008	<.02	<.009
JUN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	<.03	<.01	<.01	<.02	<.02	<.01	--	<.02	<.010	<.02	E.006	<.02	<.009
17...	<.03	<.01	<.01	<.02	<.02	<.01	--	<.02	<.010	<.02	<.008	<.02	<.009
27...	<.03	<.01	<.01	<.02	<.02	<.01	--	<.02	<.010	<.02	<.008	<.02	<.009
JUL													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	<.03	<.01	<.01	<.02	<.02	<.01	--	<.02	<.010	<.02	<.008	<.02	<.009
19...	<.03	<.01	<.01	<.02	<.02	<.01	--	<.02	<.010	<.02	<.008	<.02	<.009
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	<.03	<.01	<.01	<.02	<.02	<.01	--	<.02	<.010	<.02	<.008	<.02	<.009
15...	<.03	<.01	<.01	<.02	<.02	<.01	--	<.02	<.010	<.02	<.008	<.02	<.009
27...	<.03	<.01	<.01	<.02	<.02	<.01	--	<.02	<.010	<.02	<.008	<.02	<.009
SEP													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	<.03	<.01	<.01	<.02	<.02	<.01	--	<.02	<.010	<.02	<.008	<.02	<.009
23...	<.03	<.01	<.01	<.02	<.02	<.01	--	<.02	<.010	<.02	<.008	<.02	<.009

E Estimated laboratory analysis value.

06713500 CHERRY CREEK AT DENVER, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	TER- BACIL, WATER, DISS REC (UG/L) (04032)	TRI- BENURON METHYL WATER FLTRD (UG/L) (61159)	TRI- CLOPYR, WATER, FLTRD, GF 0.7U REC (UG/L) (49235)	DI- BROMO- METHANE WATER WHOLE RECOVER (UG/L) (30217)	BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101)	CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103)	BROMO- FORM TOTAL (UG/L) (32104)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	ACRYLO- NITRILE TOTAL (UG/L) (34215)
OCT													
10...	--	--	--	<.05	E.06	<.06	<.1	<.06	<.2	.14	E.05	E.02	<1
10...	<.010	<.009	.03	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	<.05	E.03	<.06	<.1	<.06	<.2	.12	E.04	E.01	<1
15...	<.010	<.009	<.02	--	--	--	--	--	--	--	--	--	--
NOV													
05...	--	--	--	<.05	E.06	<.06	<.1	<.06	<.2	.22	E.05	E.01	<1
05...	<.010	<.009	<.02	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	<.05	<.05	<.06	<.1	<.06	<.2	E.07	E.05	E.02	<1
20...	<.010	<.009	<.02	--	--	--	--	--	--	--	--	--	--
DEC													
04...	--	--	--	<.05	<.05	<.06	<.1	<.06	<.2	E.03	.10	E.04	<1
04...	<.010	<.009	<.02	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	<.05	<.05	<.06	<.1	<.06	<.2	E.03	.13	E.04	<1
JAN													
09...	--	--	--	<.05	<.05	<.06	<.1	<.06	<.2	E.02	.16	E.04	<1
09...	<.010	--	<.02	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	<.05	<.05	<.06	<.1	<.06	<.2	E.03	.12	E.04	<1
FEB													
07...	--	--	--	<.05	<.05	<.06	<.1	<.06	<.2	E.04	E.07	E.02	<1
07...	<.010	--	<.02	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	<.05	<.05	<.06	<.1	<.06	<.2	E.03	E.07	E.03	<1
MAR													
04...	--	--	--	<.05	<.05	<.06	<.1	<.06	<.2	E.03	.11	E.04	<1
04...	<.010	--	<.02	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	<.05	<.05	<.06	<.1	<.06	<.2	E.03	E.06	E.03	<1
20...	<.010	--	<.02	--	--	--	--	--	--	--	--	--	--
APR													
02...	--	--	--	<.05	<.05	<.06	<.1	<.06	<.2	E.02	<.05	<.04	<1
02...	<.010	--	<.02	--	--	--	--	--	--	--	--	--	--
11...	<.010	--	<.02	--	--	--	--	--	--	--	--	--	--
22...	<.010	--	E.01	--	--	--	--	--	--	--	--	--	--
MAY													
08...	--	--	--	<.05	E.05	<.06	<.1	<.06	<.2	.12	E.02	<.04	<1
08...	<.010	--	<.02	--	--	--	--	--	--	--	--	--	--
20...	<.010	--	.07	--	--	--	--	--	--	--	--	--	--
29...	<.010	--	.03	--	--	--	--	--	--	--	--	--	--
JUN													
06...	--	--	--	<.05	E.05	<.06	<.1	<.06	<.2	E.09	E.05	E.02	<1
06...	<.010	--	<.02	--	--	--	--	--	--	--	--	--	--
17...	<.010	--	<.02	--	--	--	--	--	--	--	--	--	--
27...	<.010	--	<.02	--	--	--	--	--	--	--	--	--	--
JUL													
09...	--	--	--	<.05	E.02	<.06	<.1	<.06	<.2	E.06	E.03	E.01	<1
09...	<.010	--	<.02	--	--	--	--	--	--	--	--	--	--
19...	<.010	--	<.02	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
05...	--	--	--	<.05	<.05	<.06	<.1	<.06	<.2	.13	E.02	<.04	<1
05...	<.010	--	<.02	--	--	--	--	--	--	--	--	--	--
15...	<.010	--	E.01	--	--	--	--	--	--	--	--	--	--
27...	<.010	--	<.02	--	--	--	--	--	--	--	--	--	--
SEP													
05...	--	--	--	<.05	E.08	<.06	<.1	<.06	<.2	.18	E.07	E.02	<1
05...	<.010	--	<.02	--	--	--	--	--	--	--	--	--	--
23...	<.010	--	<.02	--	--	--	--	--	--	--	--	--	--

E Estimated laboratory analysis value.

PLATTE RIVER BASIN

06713500 CHERRY CREEK AT DENVER, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	CHLORO- BENZENE (UG/L) (34301)	CHLORO- ETHANE (UG/L) (34311)	ETHYL- BENZENE (UG/L) (34371)	ETHANE HEXA- CHLORO- WATER UNFLTRD RECOVER (UG/L) (34396)	METHYL- BROMIDE (UG/L) (34413)	METHYL- CHLO- RIDE (UG/L) (34418)	METHYL ENE CHLO- RIDE (UG/L) (34423)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	TRI- CHLORO- FLUORO- METHANE (UG/L) (34488)	1,1-DI- CHLORO- ETHANE (UG/L) (34496)	1,1-DI- CHLORO- ETHYL- ENE (UG/L) (34501)	1,1,1- TRI- CHLORO- ETHANE (UG/L) (34506)	1,1,2- TRI- CHLORO- ETHANE (UG/L) (34511)
OCT													
10...	<.03	<.1	<.03	<.2	<.3	<.2	<.2	.10	<.09	<.04	<.04	<.03	<.06
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	<.03	<.1	<.03	<.2	<.3	<.2	<.2	.13	<.09	<.04	<.04	E.01	<.06
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
05...	<.03	<.1	<.03	<.2	<.3	<.2	M	.46	<.09	<.04	<.04	<.03	<.06
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	<.03	<.1	<.03	<.2	<.3	<.2	<.2	.69	<.09	<.04	<.04	<.03	<.06
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
04...	<.03	<.1	E.02	<.2	<.3	<.2	<.2	.18	<.09	<.04	<.04	<.03	<.06
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	<.03	<.1	E.02	<.2	<.3	<.2	M	.13	<.09	<.04	<.04	E.01	<.06
JAN													
09...	<.03	<.1	E.02	<.2	<.3	<.2	M	E.07	<.09	<.04	<.04	<.03	<.06
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	<.03	<.1	E.02	<.2	<.3	<.2	E.1	.16	<.09	<.04	<.04	E.02	<.06
FEB													
07...	<.03	<.1	E.01	<.2	<.3	<.2	M	.14	<.09	<.04	<.04	E.01	<.06
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	<.03	<.1	E.01	<.2	<.3	<.2	M	E.07	<.09	<.04	<.04	<.03	<.06
MAR													
04...	<.03	<.1	E.02	<.2	<.3	<.2	E.1	E.06	<.09	<.04	<.04	<.03	<.06
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	<.03	<.1	<.03	<.2	<.3	<.2	M	E.04	<.09	<.04	<.04	E.01	<.06
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
02...	<.03	<.1	<.03	<.2	<.3	<.2	<.2	E.05	<.09	<.04	<.04	<.03	<.06
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
08...	<.03	<.1	<.03	<.2	<.3	<.2	<.2	E.06	<.09	<.04	<.04	<.03	<.06
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
06...	<.03	<.1	<.03	<.2	<.3	<.2	<.2	E.09	<.09	<.04	<.04	<.03	<.06
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
09...	<.03	<.1	<.03	<.2	<.3	<.2	<.2	E.07	<.09	<.04	<.04	<.03	<.06
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
05...	<.03	<.1	<.03	<.2	<.3	<.2	M	.18	<.09	<.04	<.04	<.03	<.06
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
05...	<.03	<.1	<.03	<.2	<.3	<.2	M	.18	<.09	<.04	<.04	<.03	<.06
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--

E Estimated laboratory analysis value.

M Presence of material verified but not quantified.

06713500 CHERRY CREEK AT DENVER, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	ETHANE, 1,1,2,2 TETRA- CHLORO- WAT UNF REC (UG/L) (34516)	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541)	TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546)	BENZENE 1,2,4- TRI- CHLORO- WAT UNF REC (UG/L) (34551)	BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	NAPHTH- ALENE TOTAL (UG/L) (34696)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)
OCT													
10...	<.09	<.03	<.03	<.03	<.2	<.03	<.05	<.27	<.5	<.09	<.09	<.1	E.02
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	<.09	<.03	<.03	<.03	<.2	<.03	<.05	<.27	<.5	<.09	<.09	<.1	<.04
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
05...	<.09	<.03	<.03	<.03	<.1	<.03	<.05	<.18	<.5	<.09	<.09	<.1	E.01
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	<.09	<.03	<.03	<.03	<.1	<.03	<.05	<.18	<.5	<.09	<.09	<.1	<.04
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
04...	<.09	<.03	<.03	<.03	<.1	<.03	<.05	<.18	<.5	<.09	<.09	<.1	<.04
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	<.09	<.03	<.03	<.03	<.1	<.03	<.05	<.18	<.5	<.09	<.09	<.1	E.01
JAN													
09...	<.09	<.03	<.03	<.03	<.1	<.03	<.05	<.18	<.5	<.09	<.09	<.1	E.01
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	<.09	<.03	<.03	<.03	<.1	<.03	<.05	<.18	<.5	<.09	<.09	<.1	E.03
FEB													
07...	<.09	<.03	<.03	<.03	<.1	<.03	<.05	<.18	<.5	<.09	<.09	<.1	E.01
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	<.09	<.03	<.03	<.03	<.1	<.03	<.05	<.18	<.5	<.09	<.09	<.1	E.02
MAR													
04...	<.09	<.03	<.03	<.03	<.1	<.03	<.05	<.18	<.5	<.09	<.09	<.1	<.04
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	<.09	<.03	<.03	<.03	<.1	<.03	<.05	<.18	<.5	<.09	<.09	<.1	<.04
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
02...	<.09	<.03	<.03	<.03	<.1	<.03	<.05	<.18	<.5	<.09	<.09	<.1	<.04
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
08...	<.09	<.03	<.03	<.03	<.1	<.03	<.05	<.18	<.5	<.09	<.09	<.1	<.04
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
06...	<.09	<.03	<.03	<.03	<.1	<.03	<.05	<.18	<.5	<.09	<.09	<.1	E.02
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
09...	<.09	<.03	<.03	<.03	<.1	<.03	<.05	<.18	<.5	<.09	<.09	<.1	E.01
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
05...	<.09	<.03	<.03	<.03	<.1	<.03	<.05	<.18	<.5	<.09	<.09	<.1	E.01
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
05...	<.09	<.03	<.03	<.03	<.1	<.03	<.05	<.18	<.5	<.09	<.09	<.1	E.02
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--

E Estimated laboratory analysis value.

PLATTE RIVER BASIN

06713500 CHERRY CREEK AT DENVER, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	HEXA- CHLORO- BUT- ADIENE TOTAL (UG/L) (39702)	METHYL ACRY- LATE WATER UNFLTRD RECOVER (UG/L) (49991)	1234- TETRA METHYL BENZENE UNFLTRD REC (UG/L) (49999)	ISO- DURENE WATER UNFLTRD RECOVER (UG/L) (50000)	BROMO- ETHENE WATER UNFLTRD RECOVER (UG/L) (50002)	ETHER TERT- BUTYL UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005)	2BUTENE TRANS-1 4-DI- CHLORO UNFLTRD RECOVER (UG/L) (73547)	METHAC- RYLATE ETHYL- WATER UNFLTRD RECOVER (UG/L) (73570)	CARBON DI- SULFIDE WATER WHOLE TOTAL (UG/L) (77041)	CIS-1,2 -DI- CHLORO- ETHENE WATER WHOLE TOTAL (UG/L) (77093)	2-HEXA- NONE WATER WHOLE TOTAL (UG/L) (77103)	STYRENE TOTAL (UG/L) (77128)
OCT													
10...	<.1	<1.4	<.2	<.2	<.1	<.05	<.11	<.7	<.2	<.07	<.04	<.7	<.04
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	<.1	<1.4	<.2	<.2	<.1	<.05	<.11	<.7	<.2	<.07	E.01	<.7	E.01
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
05...	<.1	<2.0	<.2	<.2	<.1	<.05	<.08	<.7	<.2	<.07	E.01	<.7	<.04
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	<.1	<2.0	<.2	<.2	<.1	<.05	<.08	<.7	<.2	<.07	<.04	<.7	<.04
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
04...	<.1	<2.0	<.2	<.2	<.1	<.05	<.08	<.7	<.2	<.07	<.04	<.7	<.04
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	<.1	<2.0	<.2	<.2	<.1	<.05	<.08	<.7	<.2	<.07	<.04	<.7	<.04
JAN													
09...	<.1	<2.0	<.2	<.2	<.1	<.05	<.08	<.7	<.2	<.07	<.04	<.7	<.04
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	<.1	<2.0	<.2	<.2	<.1	<.05	<.08	<.7	<.2	<.07	<.04	<.7	<.04
FEB													
07...	<.1	<2.0	<.2	<.2	<.1	<.05	<.08	<.7	<.2	<.07	<.04	<.7	<.04
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	<.1	<2.0	<.2	<.2	<.1	<.05	<.08	<.7	<.2	<.07	<.04	<.7	<.04
MAR													
04...	<.1	<2.0	<.2	<.2	<.1	<.05	<.08	<.7	<.2	<.07	<.04	<.7	<.04
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	<.1	<2.0	<.2	<.2	<.1	<.05	<.08	<.7	<.2	<.07	<.04	<.7	<.04
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
02...	<.1	<2.0	<.2	<.2	<.1	<.05	<.08	<.7	<.2	<.07	<.04	<.7	<.04
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
08...	<.1	<2.0	<.2	<.2	<.1	<.05	<.08	<.7	<.2	<.07	<.04	<.7	<.04
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
06...	<.1	<2.0	<.2	<.2	<.1	<.05	<.08	<.7	<.2	<.07	E.02	<.7	<.04
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
09...	<.1	<2.0	<.2	<.2	<.1	<.05	<.08	<.7	<.2	<.07	<.04	<.7	<.04
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
05...	<.1	<2.0	<.2	<.2	<.1	<.05	<.08	<.7	<.2	<.07	E.01	<.7	<.04
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
05...	<.1	<2.0	<.2	<.2	<.1	<.05	<.08	<.7	<.2	<.07	<.04	<.7	<.04
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--

E Estimated laboratory analysis value.

06713500 CHERRY CREEK AT DENVER, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	O-XYLENE WATER WHOLE TOTAL (UG/L) (77135)	1,1-DI CHLORO-PENE, WAT, WH TOTAL (UG/L) (77168)	2,2-DI CHLORO-PANE WAT, WH TOTAL (UG/L) (77170)	1,3-DI-CHLORO-PROPANE WAT. WH TOTAL (UG/L) (77173)	TOLUENE O-ETHYL WATER UNFLTRD RECOVER (UG/L) (77220)	BENZENE 123-TRI METHYL-WATER UNFLTRD RECOVER (UG/L) (77221)	BENZENE 124-TRI METHYL WATER UNFLTRD RECOVER (UG/L) (77222)	ISO-PROPYL-BENZENE WATER REC (UG/L) (77223)	BENZENE N-PROPY WATER UNFLTRD REC (UG/L) (77224)	BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226)	O-CHLORO-TOLUENE WATER WHOLE TOTAL (UG/L) (77275)	TOLUENE P-CHLOR WATER UNFLTRD REC (UG/L) (77277)	METHANE BROMO CHLORO-WAT UNFLTRD REC (UG/L) (77297)
OCT													
10...	<.04	<.03	<.05	<.1	<.06	<.1	<.06	<.03	<.04	<.04	<.03	<.06	<.04
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	<.04	<.03	<.05	<.1	<.06	<.1	E.01	<.03	<.04	<.04	<.03	<.06	<.04
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
05...	<.07	<.05	<.05	<.1	<.06	<.1	<.06	<.06	<.04	<.04	<.03	<.05	<.07
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	<.07	<.05	<.05	<.1	<.06	<.1	<.06	<.06	<.04	<.04	<.03	<.05	<.07
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
04...	E.03	<.05	<.05	<.1	<.06	<.1	E.02	<.06	<.04	<.04	<.03	<.05	<.07
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	E.03	<.05	<.05	<.1	E.01	<.1	E.03	<.06	<.04	E.01	<.03	<.05	<.07
JAN													
09...	E.05	<.05	<.05	<.1	<.06	<.1	E.03	<.06	<.04	<.04	<.03	<.05	<.07
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	E.04	<.05	<.05	<.1	<.06	<.1	E.04	<.06	<.04	<.04	<.03	<.05	<.07
FEB													
07...	E.02	<.05	<.05	<.1	<.06	<.1	<.06	<.06	<.04	<.04	<.03	<.05	<.07
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	E.02	<.05	<.05	<.1	<.06	<.1	<.06	<.06	<.04	<.04	<.03	<.05	<.07
MAR													
04...	<.07	<.05	<.05	<.1	<.06	<.1	E.04	<.06	<.04	<.04	<.03	<.05	<.07
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	<.07	<.05	<.05	<.1	<.06	<.1	<.06	<.06	<.04	<.04	<.03	<.05	<.07
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
02...	<.07	<.05	<.05	<.1	<.06	<.1	<.06	<.06	<.04	<.04	<.03	<.05	<.07
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
08...	<.07	<.05	<.05	<.1	<.06	<.1	<.06	<.06	<.04	<.04	<.03	<.05	<.07
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
06...	<.07	<.05	<.05	<.1	<.06	<.1	<.06	<.06	<.04	<.04	<.03	<.05	<.07
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
09...	<.07	<.05	<.05	<.1	<.06	<.1	<.06	<.06	<.04	<.04	<.03	<.05	<.07
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
05...	<.07	<.05	<.05	<.1	<.06	<.1	<.06	<.06	<.04	<.04	<.03	<.05	<.07
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
05...	<.07	<.05	<.05	<.1	<.06	<.1	<.06	<.06	<.04	<.04	<.03	<.05	<.07
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--

E Estimated laboratory analysis value.

PLATTE RIVER BASIN

06713500 CHERRY CREEK AT DENVER, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L) (77342)	BENZENE SEC BUTYL- WATER UNFLTRD REC (UG/L) (77350)	BENZENE TERT- BUTYL- WATER UNFLTRD REC (UG/L) (77353)	P-ISO- PROPYL- TOLUENE WATER WHOLE REC (UG/L) (77356)	METHYL IODIDE WATER UNFLTRD RECOVER (UG/L) (77424)	123-TRI CHLORO- PROPANE WATER WHOLE TOTAL (UG/L) (77443)	ETHANE, 1112- TETRA- CHLORO- WAT UNF REC (UG/L) (77562)	1,2,3- TRI- CHLORO BENZENE WAT, WH REC (UG/L) (77613)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (UG/L) (77651)	FREON- 113 WATER UNFLTRD REC (UG/L) (77652)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)	PROPENE 3- CHLORO- WATER UNFLTRD RECOVER (UG/L) (78109)	METHYL ISO- BUTYL KETONE TOTAL (UG/L) (78133)
OCT													
10...	<.2	<.03	<.06	.36	<.12	<.16	<.03	<.3	<.04	<.06	<.2	<.07	<.4
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	<.2	<.03	<.06	2.13	<.12	<.16	<.03	<.3	<.04	<.06	<.2	<.07	1.3
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
05...	<.2	<.03	<.05	<.07	<.25	<.16	<.03	<.3	<.04	<.06	<.2	<.07	<.4
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	<.2	<.03	<.05	E.06	<.25	<.16	<.03	<.3	<.04	<.06	<.2	<.07	<.4
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
04...	<.2	<.03	<.05	<.07	<.25	<.16	<.03	<.3	<.04	<.06	<.2	<.07	<.4
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	<.2	<.03	<.05	1.25	<.25	<.16	<.03	<.3	<.04	<.06	<.2	<.07	<.4
JAN													
09...	<.2	<.03	<.05	<.07	<.25	<.16	<.03	<.3	<.04	<.06	<.2	<.07	<.4
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	<.2	<.03	<.05	<.07	<.25	<.16	<.03	<.3	<.04	<.06	<.2	<.07	<.4
FEB													
07...	<.2	<.03	<.05	E.01	<.25	<.16	<.03	<.3	<.04	<.06	<.2	<.07	<.4
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	<.2	<.03	<.05	E.02	<.25	<.16	<.03	<.3	<.04	<.06	<.2	<.07	<.4
MAR													
04...	<.2	<.03	<.05	E.03	<.25	<.16	<.03	<.3	<.04	<.06	<.2	<.07	<.4
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	<.2	<.03	<.05	<.07	<.25	<.16	<.03	<.3	<.04	<.06	<.2	<.07	<.4
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
02...	<.2	<.03	<.05	<.07	<.25	<.16	<.03	<.3	<.04	<.06	<.2	<.07	<.4
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
08...	<.2	<.03	<.05	<.07	<.25	<.16	<.03	<.3	<.04	<.06	<.2	<.07	<.4
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
06...	<.2	<.03	<.05	E.01	<.25	<.16	<.03	<.3	<.04	<.06	<.2	<.07	<.4
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
09...	<.2	<.03	<.05	<.07	<.25	<.16	<.03	<.3	<.04	<.06	<.2	<.07	<.4
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
05...	<.2	<.03	<.05	<.07	<.25	<.16	<.03	<.3	<.04	<.06	<.2	<.07	<.4
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
05...	<.2	<.03	<.05	E.07	<.25	<.16	<.03	<.3	<.04	<.06	<.2	<.07	<.4
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--

E Estimated laboratory analysis value.

06713500 CHERRY CREEK AT DENVER, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	ACETONE WATER WHOLE TOTAL (UG/L) (81552)	BROMO- BENZENE WATER, WHOLE, TOTAL (UG/L) (81555)	ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576)	DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577)	METH- ACRYLO- NITRILE WATER UNFLTRD RECOVER (UG/L) (81593)	METHYL- ETHYL- KETONE WATER WHOLE TOTAL (UG/L) (81595)	METHAC- RYLATE METHYL WATER UNFLTRD RECOVER (UG/L) (81597)	FURAN, TETRA- HYDRO- WATER UNFLTRD RECOVER (UG/L) (81607)	DIBROMO CHLORO- PROPANE WATER WHOLE TOT.REC (UG/L) (82625)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)
OCT										
10...	E5	<.04	<.2	<.10	<.6	<1.6	<.3	<2	<.5	<.06
10...	--	--	--	--	--	--	--	--	--	--
15...	7	<.04	<.2	<.10	<.6	<1.6	<.3	<2	<.5	E.02
15...	--	--	--	--	--	--	--	--	--	--
NOV										
05...	<7	<.04	<.2	<.10	<.6	<5.0	<.3	<2	<.5	E.01
05...	--	--	--	--	--	--	--	--	--	--
20...	<7	<.04	<.2	<.10	<.6	<5.0	<.3	<2	<.5	E.03
20...	--	--	--	--	--	--	--	--	--	--
DEC										
04...	<7	<.04	<.2	<.10	<.6	<5.0	<.3	<2	<.5	E.05
04...	--	--	--	--	--	--	--	--	--	--
18...	E4	<.04	<.2	<.10	<.6	<5.0	<.3	<2	<.5	E.06
JAN										
09...	<7	<.04	<.2	<.10	<.6	<5.0	<.3	<2	<.5	E.07
09...	--	--	--	--	--	--	--	--	--	--
24...	<7	<.04	<.2	<.10	<.6	<5.0	<.3	<2	<.5	E.07
FEB										
07...	<7	<.04	<.2	<.10	<.6	<5.0	<.3	<2	<.5	E.03
07...	--	--	--	--	--	--	--	--	--	--
21...	<7	<.04	<.2	<.10	<.6	<5.0	<.3	<2	<.5	E.04
MAR										
04...	<7	<.04	<.2	<.10	<.6	<5.0	<.3	<2	<.5	E.07
04...	--	--	--	--	--	--	--	--	--	--
20...	<7	<.04	<.2	<.10	<.6	<5.0	<.3	<2	<.5	E.03
20...	--	--	--	--	--	--	--	--	--	--
APR										
02...	<7	<.04	<.2	<.10	<.6	<5.0	<.3	<2	<.5	<.06
02...	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
MAY										
08...	<7	<.04	<.2	<.10	<.6	<5.0	<.3	<2	<.5	<.06
08...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
JUN										
06...	30	<.04	<.2	<.10	<.6	<5.0	<.3	<2	<.5	<.06
06...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--
JUL										
09...	<7	<.04	<.2	<.10	<.6	<5.0	<.3	<2	<.5	E.03
09...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
AUG										
05...	<7	<.04	<.2	<.10	<.6	<5.0	<.3	<2	<.5	<.06
05...	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--
SEP										
05...	10	<.04	<.2	<.10	<.6	<5.0	<.3	<2	<.5	E.03
05...	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--

E Estimated laboratory analysis value.

PLATTE RIVER BASIN

06713500 CHERRY CREEK AT DENVER, CO--Continued
(National Water-Quality Assessment Program station)

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	1360	967	1030
2	---	---	---	---	---	---	---	---	---	1360	1000	1080
3	---	---	---	---	---	---	---	---	---	1110	982	1040
4	---	---	---	---	---	---	---	---	---	1120	1040	1070
5	---	---	---	---	---	---	---	---	---	1090	1040	1070
6	---	---	---	---	---	---	---	---	---	1320	1060	1100
7	---	---	---	---	---	---	---	---	---	1090	1060	1080
8	---	---	---	---	---	---	---	---	---	1110	1040	1080
9	---	---	---	---	---	---	---	---	---	1110	1030	1060
10	---	---	---	---	---	---	---	---	---	1170	999	1060
11	---	---	---	---	---	---	---	---	---	1100	744	1020
12	---	---	---	---	---	---	---	---	---	1010	664	911
13	---	---	---	---	---	---	---	---	---	1060	977	1010
14	---	---	---	---	---	---	---	---	---	1140	886	1040
15	---	---	---	---	---	---	---	---	---	1100	942	1020
16	---	---	---	---	---	---	---	---	---	1100	736	960
17	---	---	---	---	---	---	---	---	---	1040	787	939
18	---	---	---	---	---	---	---	---	---	1040	988	1020
19	---	---	---	---	---	---	---	---	---	1190	1020	1060
20	---	---	---	---	---	---	---	---	---	1090	1020	1050
21	---	---	---	---	---	---	---	---	---	1270	1020	1060
22	---	---	---	---	---	---	---	---	---	1100	1060	1080
23	---	---	---	---	---	---	1250	1020	1120	1140	360	1070
24	---	---	---	---	---	---	1130	996	1070	594	258	397
25	---	---	---	---	---	---	1110	988	1060	1060	594	799
26	---	---	---	---	---	---	1100	961	1050	1310	895	1030
27	---	---	---	---	---	---	1070	940	1020	1140	1060	1090
28	---	---	---	---	---	---	1060	842	998	1190	1080	1130
29	---	---	---	---	---	---	1020	903	981	1170	1060	1100
30	---	---	---	---	---	---	1020	858	984	1190	1030	1060
31	---	---	---	---	---	---	---	---	---	1120	1020	1080
MONTH	---	---	---	---	---	---	---	---	---	1360	258	1020

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	1120	1010	1090	---	---	---	1080	1000	1040	937	902	919
2	1050	1010	1040	---	---	---	1080	988	1030	968	928	941
3	1300	644	1080	---	---	---	1080	1020	1040	992	936	959
4	764	388	586	---	---	---	1080	879	986	1010	903	968
5	1120	728	940	---	---	---	964	413	835	1360	987	1010
6	1110	1040	1070	---	---	---	1080	730	874	1360	940	1030
7	1140	1060	1090	---	---	---	1010	936	976	1020	788	921
8	1080	1020	1070	---	---	---	1010	969	984	988	784	899
9	1060	1020	1040	---	---	---	1230	943	989	1020	484	854
10	1100	994	1030	1090	174	866	1020	953	985	838	429	646
11	1040	996	1010	840	387	684	1010	934	977	884	724	854
12	1030	962	1000	963	831	872	1010	944	982	947	223	707
13	1050	988	1020	926	879	895	1060	923	977	691	347	534
14	1110	866	1010	942	853	907	1030	954	995	854	486	768
15	1030	979	1010	1070	878	927	1040	842	998	901	829	865
16	1060	986	1020	949	833	908	1030	791	919	942	796	910
17	1060	1010	1040	981	831	928	844	722	796	1090	749	903
18	1070	1000	1040	1010	887	957	815	714	780	936	394	818
19	1060	778	1020	1070	935	998	811	678	763	908	527	762
20	977	593	794	1070	920	991	1010	747	786	976	908	945
21	1150	520	953	1300	958	1030	847	465	756	994	964	980
22	1000	550	840	1060	699	937	928	620	852	1030	992	1010
23	1060	1000	1040	1030	981	999	930	730	860	1290	1020	1050
24	1120	1030	1050	1210	944	989	961	813	908	1120	1040	1050
25	1040	1010	1030	1020	953	999	1150	913	952	1070	1030	1050
26	1130	1040	1060	1030	949	997	944	888	917	1080	682	954
27	---	---	---	1030	975	1010	1060	856	913	1200	1010	1050
28	---	---	---	1030	893	1000	1060	901	983	1100	1030	1050
29	---	---	---	1070	971	1010	1060	241	812	1080	1060	1070
30	---	---	---	1080	968	1030	854	464	749	1090	955	1050
31	---	---	---	1310	999	1060	1050	852	897	---	---	---
MONTH	---	---	---	---	---	---	1230	241	913	1360	223	918

PLATTE RIVER BASIN

06713500 CHERRY CREEK AT DENVER, CO--Continued
 (National Water-Quality Assessment Program station)

TEMPERATURE WATER (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	15.3	9.8	12.4
2	---	---	---	---	---	---	---	---	---	19.0	9.3	12.9
3	---	---	---	---	---	---	---	---	---	21.1	9.4	14.5
4	---	---	---	---	---	---	---	---	---	20.8	10.8	15.0
5	---	---	---	---	---	---	---	---	---	21.6	11.6	15.5
6	---	---	---	---	---	---	---	---	---	22.9	11.2	16.0
7	---	---	---	---	---	---	---	---	---	22.1	11.8	16.2
8	---	---	---	---	---	---	---	---	---	17.4	11.1	14.4
9	---	---	---	---	---	---	---	---	---	20.3	8.8	13.9
10	---	---	---	---	---	---	---	---	---	17.8	10.4	13.6
11	---	---	---	---	---	---	---	---	---	17.5	11.7	13.6
12	---	---	---	---	---	---	---	---	---	15.2	10.7	12.3
13	---	---	---	---	---	---	---	---	---	21.6	9.8	15.0
14	---	---	---	---	---	---	---	---	---	17.2	11.4	14.3
15	---	---	---	---	---	---	---	---	---	18.8	11.5	15.0
16	---	---	---	---	---	---	---	---	---	14.0	12.1	12.8
17	---	---	---	---	---	---	---	---	---	18.3	11.4	14.2
18	---	---	---	---	---	---	---	---	---	22.5	12.1	16.7
19	---	---	---	---	---	---	---	---	---	22.6	13.0	17.0
20	---	---	---	---	---	---	---	---	---	17.4	12.5	14.7
21	---	---	---	---	---	---	---	---	---	20.6	12.9	15.8
22	---	---	---	---	---	---	---	---	---	21.8	10.6	15.4
23	---	---	---	---	---	---	21.1	9.0	14.3	20.0	10.7	14.1
24	---	---	---	---	---	---	19.7	8.6	13.7	11.9	8.6	10.3
25	---	---	---	---	---	---	16.6	7.9	11.9	21.1	9.8	14.9
26	---	---	---	---	---	---	18.4	9.1	13.2	22.0	12.1	16.7
27	---	---	---	---	---	---	18.0	10.9	13.6	24.0	13.3	17.4
28	---	---	---	---	---	---	21.1	9.5	14.6	24.4	13.4	18.2
29	---	---	---	---	---	---	21.5	10.6	15.7	23.2	14.0	18.1
30	---	---	---	---	---	---	22.5	11.0	16.2	26.0	14.2	19.5
31	---	---	---	---	---	---	---	---	---	25.6	15.4	19.6
MONTH	---	---	---	---	---	---	---	---	---	26.0	8.6	15.2

PLATTE RIVER BASIN

06713500 CHERRY CREEK AT DENVER, CO--Continued
(National Water-Quality Assessment Program station)

TEMPERATURE WATER (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN									
1	24.0	15.2	18.7	27.1	17.2	21.8	22.8	17.7	20.2	23.0	16.9	19.7
2	26.0	14.7	19.3	26.9	17.8	21.7	25.0	16.4	20.0	24.7	15.7	19.5
3	23.7	15.0	18.6	25.7	18.0	20.8	24.3	18.6	21.0	23.4	16.2	19.1
4	16.7	14.6	15.5	27.6	16.6	21.3	27.9	18.2	21.8	25.2	17.0	19.9
5	23.6	13.0	17.8	27.9	17.6	22.0	27.3	18.7	22.1	25.3	15.8	19.9
6	25.8	14.4	19.5	23.9	18.8	21.2	27.0	17.7	21.2	25.4	16.6	20.2
7	24.0	15.2	19.1	26.5	18.1	21.9	27.3	17.3	21.3	25.2	16.8	20.4
8	25.4	14.9	19.5	29.0	18.2	22.7	26.5	17.4	21.1	24.5	17.7	20.3
9	23.1	15.7	19.6	28.4	18.5	22.8	26.4	16.5	20.8	20.2	17.6	18.7
10	22.2	15.1	18.3	27.4	16.8	21.8	27.1	16.5	21.2	20.2	17.0	18.0
11	23.0	14.4	18.3	27.4	17.5	21.7	27.2	16.8	21.1	22.1	16.0	18.5
12	23.8	14.8	19.0	27.8	17.5	21.9	23.6	16.2	19.2	21.9	15.7	18.1
13	22.6	14.8	18.3	27.7	16.9	21.9	23.8	15.1	18.8	19.3	15.2	16.6
14	24.0	14.9	19.0	28.6	18.0	22.3	25.8	15.2	19.7	21.2	14.3	17.1
15	21.7	15.6	18.2	28.7	17.9	22.4	26.0	15.8	20.0	22.2	14.0	17.6
16	24.7	15.3	19.4	28.9	18.0	22.6	27.1	16.6	21.0	22.4	14.4	17.8
17	24.5	15.8	20.1	28.3	17.5	22.2	24.6	15.5	19.2	21.0	14.8	17.5
18	25.8	15.9	20.6	28.5	17.6	22.3	23.2	15.8	18.8	20.9	14.8	16.8
19	24.7	16.6	20.3	28.7	18.0	22.5	24.7	15.5	19.2	19.3	13.5	16.1
20	24.7	17.8	20.4	28.8	18.6	22.8	23.3	17.3	20.0	21.1	13.1	16.6
21	25.6	16.7	20.5	28.1	18.9	22.5	25.1	17.4	20.1	19.4	12.9	15.6
22	25.3	18.3	21.1	26.4	18.5	21.8	24.4	16.6	19.4	19.8	12.4	15.5
23	26.2	17.3	21.2	25.9	17.9	21.3	23.4	16.1	19.3	19.7	12.6	15.6
24	26.2	17.5	21.1	28.7	17.6	22.2	25.3	16.3	20.1	20.2	12.6	16.0
25	24.5	17.9	20.6	25.8	18.3	21.5	26.5	17.2	20.7	17.7	13.0	15.1
26	26.2	16.9	20.8	27.1	17.5	21.4	26.5	17.2	21.0	17.2	13.6	15.0
27	27.8	17.2	21.1	25.9	17.3	21.2	24.5	17.5	19.5	18.0	12.3	15.0
28	27.9	16.7	21.0	25.5	17.3	20.8	23.2	17.0	19.3	18.0	13.4	15.4
29	27.1	16.5	21.5	27.7	16.6	21.5	25.0	16.5	19.3	18.7	12.8	15.7
30	25.9	16.9	21.1	28.4	18.0	22.4	24.3	16.5	19.8	18.4	12.8	15.5
31	---	---	---	28.3	17.8	22.4	25.5	16.8	20.4	---	---	---
MONTH	27.9	13.0	19.6	29.0	16.6	21.9	27.9	15.1	20.2	25.4	12.3	17.4

06714000 SOUTH PLATTE RIVER AT DENVER, CO

LOCATION.--Lat 39°45'35", long 105°00'10", in NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.28, T.3 S., R.68 W., Denver County, Hydrologic Unit 10190003, on right bank 90 ft upstream from Nineteenth Street Bridge in Denver, and 0.4 mi downstream from Cherry Creek.

DRAINAGE AREA.--3,861 mi².

PERIOD OF RECORD.--May to October 1889, June to October 1890, July 1895 to current year. Monthly discharge only for some periods, published in WSP 1310. Statistical summary computed for 1976 to current year. Water-quality data available, April 1993 to September 1995, and May 1997 to September 2002.

REVISED RECORDS.--WSP 1310: 1934(M). WSP 1730: 1957(M). WDR CO-86-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 5,157.64 ft above sea level, adjustment of 1960. Prior to Aug. 12, 1909, nonrecording gages, and Aug. 12, 1909 to Aug. 28, 1931, water-stage recorder, at several sites within 0.5 mi of present site at various datums. Aug. 29, 1931 to June 28, 1965, water-stage recorder at site 70 ft downstream at datum 3.66 ft lower. June 29, 1965 to Mar. 18, 1966, water-stage recorder at site 70 ft downstream at present datum.

REMARKS.--No estimated daily discharges. Records good except for flows above 473 ft³/s, which are fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation of about 79,000 acres and municipal use, and return flow from irrigated areas. Water-quality data were collected as part of a water-quality assessment of drought conditions and are published in the "Drought Synoptic Sampling" section of this report.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112	113	109	111	117	158	123	78	112	65	47	53
2	110	106	111	107	119	182	133	103	115	61	42	52
3	110	105	112	108	120	200	131	97	101	77	52	52
4	109	105	115	110	119	241	124	95	432	70	65	50
5	142	108	124	115	105	179	135	89	163	98	139	50
6	120	101	123	118	100	165	140	86	119	437	85	50
7	118	108	124	119	99	165	145	85	158	136	63	48
8	115	228	120	120	109	163	146	86	191	92	58	56
9	121	118	119	118	108	181	156	94	206	73	58	60
10	123	111	124	157	110	165	152	94	199	211	54	161
11	125	104	107	143	110	155	141	101	201	177	52	90
12	119	102	118	131	110	148	121	167	187	85	54	392
13	122	107	110	130	110	154	112	111	180	80	57	454
14	124	104	101	128	109	209	104	93	179	70	51	115
15	139	103	112	124	113	212	99	101	176	63	43	87
16	126	101	139	123	123	196	94	124	182	62	47	81
17	124	95	145	126	129	184	90	155	193	60	48	70
18	121	120	128	119	135	194	86	117	180	55	48	193
19	121	129	121	114	155	205	91	108	178	54	49	259
20	119	110	118	117	140	167	87	106	177	55	52	94
21	116	101	120	117	147	162	87	100	98	54	71	81
22	117	101	124	117	146	165	79	85	146	65	80	80
23	119	273	123	131	145	159	69	88	89	61	78	81
24	118	134	115	125	147	159	67	851	81	55	65	78
25	117	112	113	140	163	155	69	246	73	50	60	73
26	112	126	116	136	165	154	73	199	81	47	57	103
27	111	118	117	130	154	139	76	190	70	54	61	89
28	110	107	117	126	149	129	80	149	68	65	119	90
29	116	104	118	121	---	122	76	139	84	65	268	91
30	120	107	112	120	---	122	66	126	68	60	122	92
31	119	---	115	119	---	122	---	120	---	56	66	---
TOTAL	3695	3561	3670	3820	3556	5211	3152	4383	4487	2713	2211	3325
MEAN	119	119	118	123	127	168	105	141	150	87.5	71.3	111
MAX	142	273	145	157	165	241	156	851	432	437	268	454
MIN	109	95	101	107	99	122	66	78	68	47	42	48
AC-FT	7330	7060	7280	7580	7050	10340	6250	8690	8900	5380	4390	6600

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2002, BY WATER YEAR (WY)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	199	190	142	130	145	193	423	894	808	572	473	228															
MAX	1184	809	366	282	273	420	1377	2970	2759	2546	1774	911															
(WY)	1985	1985	1985	1985	1984	1983	1984	1980	1983	1995	1984	1984															
MIN	66.8	94.4	84.1	64.9	80.7	94.9	99.1	141	150	87.5	71.3	76.5															
(WY)	1978	1976	1978	1979	1977	1978	1982	2002	2002	2002	2002	1977															

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1976 - 2002

ANNUAL TOTAL	84638	43784	
ANNUAL MEAN	232	120	a368
HIGHEST ANNUAL MEAN			961
LOWEST ANNUAL MEAN			120
HIGHEST DAILY MEAN	2120	May 5	b4020
LOWEST DAILY MEAN	95	Nov 17	c42
ANNUAL SEVEN-DAY MINIMUM	102	Nov 11	48
MAXIMUM PEAK FLOW			2090
MAXIMUM PEAK STAGE			6.15
ANNUAL RUNOFF (AC-FT)	167900	86850	266300
10 PERCENT EXCEEDS	441	177	738
50 PERCENT EXCEEDS	169	115	187
90 PERCENT EXCEEDS	112	60	88

a Average discharge for 79 years (water years 1896-1974), 344 ft³/s; 249200 acre-ft/yr, prior to completion of Chatfield Dam.

b Maximum daily discharge for period of record, 12000 ft³/s, Jun 17, 1965.

c Minimum daily discharge for period of record, 8.8 ft³/s, Mar 25, 1951.

d Maximum discharge and stage for period of record, 40300 ft³/s, Jun 17, 1965, gage height, 18.66 ft, from floodmarks, present datum, from rating curve extended above 2700 ft³/s, on basis of contracted-opening measurement of peak flow.

06714215 SOUTH PLATTE RIVER AT 64TH AVENUE, AT COMMERCE CITY, CO

LOCATION.--Lat 39°48'44", long 104°57'28", in NW¹/₄NW¹/₄ sec.12, T.3 S., R.68 W., Adams County, Hydrologic Unit 10190003, on left bank 300 ft southeast of intersection of York Street and East 64th Avenue, and 1,900 ft upstream from mouth of Sand Creek at northwest corner of Metro Denver Sewage Disposal plant at Commerce City.

DRAINAGE AREA.--3,884 mi².

PERIOD OF RECORD.--January 1982 to current year.

REVISED RECORDS.--WDR CO-86-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry, and concrete control. Elevation of gage is 5,105 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by transmountain diversions, storage and flood-control reservoirs, power developments, diversions for irrigation and municipal use, and return flow from irrigated areas. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	123	12	7.5	7.6	181	24	36	33	33	8.7	17
2	55	90	12	8.7	9.8	201	23	63	77	33	9.7	13
3	56	21	11	8.4	7.9	228	20	52	60	37	12	14
4	59	20	11	11	6.0	234	20	51	305	41	13	16
5	99	20	12	13	5.2	109	22	46	19	48	89	16
6	78	20	12	11	6.8	32	19	34	11	542	66	16
7	77	18	12	8.6	8.5	31	20	18	9.9	189	17	15
8	76	47	13	7.8	7.5	29	18	20	9.9	106	13	20
9	85	18	13	7.6	7.5	36	17	42	12	82	14	26
10	87	17	12	7.3	8.2	30	15	45	12	259	13	177
11	89	16	11	8.7	7.7	27	41	58	9.5	184	11	72
12	82	18	12	9.1	6.6	24	84	163	11	36	14	673
13	83	16	11	8.6	6.6	22	71	80	11	25	14	624
14	85	15	10	7.1	7.8	25	63	50	12	21	12	106
15	107	17	12	6.3	9.3	24	58	64	13	16	13	19
16	113	16	13	23	7.9	23	50	92	15	15	11	15
17	140	16	13	13	8.5	21	45	150	75	16	11	12
18	138	19	11	12	8.3	21	43	88	34	14	13	104
19	137	15	9.9	12	7.8	22	52	73	35	13	10	221
20	134	15	11	12	7.1	21	53	70	110	11	10	64
21	134	15	9.1	11	8.4	20	48	68	56	11	31	42
22	135	16	9.6	13	47	22	43	46	132	15	43	40
23	148	74	11	11	175	20	28	45	50	10	35	41
24	138	16	7.7	9.9	176	19	23	1080	39	14	15	35
25	137	14	8.7	9.6	192	19	26	154	33	11	16	31
26	130	14	8.5	9.4	199	20	31	13	35	11	15	76
27	125	14	8.2	10	183	20	33	10	32	11	12	50
28	125	13	8.2	9.2	174	21	36	9.3	32	12	88	46
29	131	13	7.2	8.8	---	22	36	8.9	36	9.6	317	51
30	135	13	8.1	8.2	---	21	26	7.3	33	9.6	137	55
31	130	---	9.1	8.0	---	26	---	8.1	---	9.4	29	---
TOTAL	3304	759	329.3	310.8	1307.0	1571	1088	2744.6	1352.3	1844.6	1112.4	2707
MEAN	106.6	25.30	10.62	10.03	46.68	50.68	36.27	88.54	45.08	59.50	35.88	90.23
MAX	148	123	13	23	199	234	84	1080	305	542	317	673
MIN	55	13	7.2	6.3	5.2	19	15	7.3	9.5	9.4	8.7	12
AC-FT	6550	1510	653	616	2590	3120	2160	5440	2680	3660	2210	5370

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2002, BY WATER YEAR (WY)

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	
MEAN	111.8	96.24	66.24	91.77	70.39	113.8	298.9	700.2	538.0	446.9	367.9	127.0										
MAX	1286	927	199	235	325	305	1335	2675	2560	2130	1410	755										
(WY)	1985	1985	1986	1984	1984	1984	1984	1987	1995	1995	1984	1984										
MIN	10.0	9.00	8.79	10.0	8.58	6.81	21.0	33.2	45.1	42.5	35.9	20.1										
(WY)	1989	1989	1991	2002	1982	1995	1991	1997	2002	1994	2002	1992										

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1982 - 2002

ANNUAL TOTAL	46121.0	18430.0		
ANNUAL MEAN	126.4	50.49	260.1	
HIGHEST ANNUAL MEAN			825	1983
LOWEST ANNUAL MEAN			50.5	2002
HIGHEST DAILY MEAN	2530	May 5	4110	May 27 1987
LOWEST DAILY MEAN	7.2	Dec 29	2.1	Mar 14 1995
ANNUAL SEVEN-DAY MINIMUM	8.1	Dec 24	3.7	Mar 11 1995
MAXIMUM PEAK FLOW			4120	Sep 12 14300 Jun 8 1987
MAXIMUM PEAK STAGE			5.75	Sep 12 8.09 Jun 8 1987
ANNUAL RUNOFF (AC-FT)	91480	36560	188400	
10 PERCENT EXCEEDS	310	131	624	
50 PERCENT EXCEEDS	55	20	70	
90 PERCENT EXCEEDS	12	8.6	9.5	

394839104570300 SAND CREEK AT MOUTH NEAR COMMERCE CITY, CO

LOCATION.--Lat 39°48'39", long 104°57'03", in SE¹/₄NW¹/₄NW¹/₄ sec.12, T.3 S., R.68 W., Adams County, Hydrologic Unit 10190003, on left bank 800 ft upstream from mouth and 50 ft upstream from confluence of Burlington Ditch and Sand Creek in northeast corner of Metro Wastewater Plant.

DRAINAGE AREA.--191 mi².

PERIOD OF RECORD.--January 1992 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,120 ft above sea level, from topographic map. Prior to Mar 1, 2000, at site 400 ft downstream at different datum. Supplementary recorder on Burlington Ditch return flows, 50 ft downstream from gage.

REMARKS.--Records fair, except for estimated daily discharges, which are poor. Records include return flows from Burlington ditch. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data for Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	19	17	16	15	e26	17	32	72	33	11	27
2	39	17	17	16	15	e29	17	31	40	28	13	23
3	38	18	17	17	17	e29	17	e32	55	33	23	21
4	39	16	17	16	17	e77	17	31	198	31	34	15
5	55	16	17	16	17	e82	16	26	56	31	59	14
6	43	16	17	16	17	60	17	49	38	69	58	13
7	40	16	17	16	17	47	19	53	26	38	43	11
8	44	77	16	16	17	e71	18	50	18	24	47	13
9	44	25	16	16	16	e167	17	34	79	22	45	18
10	45	19	17	29	17	e174	51	32	108	70	37	30
11	50	16	17	22	17	e81	80	36	107	64	15	26
12	54	15	17	19	17	27	48	44	99	39	14	239
13	53	15	16	18	18	31	50	39	80	33	16	77
14	54	14	17	17	17	54	50	34	78	31	15	85
15	70	14	17	16	41	30	53	30	80	26	15	41
16	e53	15	22	17	62	26	e46	37	84	24	13	15
17	e26	15	27	16	79	21	30	59	67	18	14	11
18	e22	15	23	15	85	24	31	46	57	18	13	51
19	e24	16	19	14	122	26	23	43	53	26	14	171
20	e24	15	17	15	94	20	17	40	147	58	15	53
21	e26	15	17	15	90	19	21	37	57	48	21	43
22	e25	15	18	16	e75	18	21	36	76	59	42	35
23	e22	103	18	18	e17	18	19	34	50	37	44	38
24	20	39	17	18	e17	17	22	275	38	33	35	33
25	20	21	16	23	e20	17	19	66	32	23	28	35
26	20	24	16	26	e23	18	18	43	26	13	28	41
27	21	23	16	21	e21	18	24	31	22	13	23	43
28	21	17	16	26	e21	17	30	26	16	12	32	41
29	21	16	16	20	---	17	29	19	44	13	77	40
30	21	16	15	17	---	17	29	18	36	13	74	39
31	19	---	15	15	---	17	---	85	---	12	39	---
TOTAL	1093	678	540	558	1001	1295	866	1448	1939	992	957	1342
MEAN	35.3	22.6	17.4	18.0	35.8	41.8	28.9	46.7	64.6	32.0	30.9	44.7
MAX	70	103	27	29	122	174	80	275	198	70	77	239
MIN	19	14	15	14	15	17	16	18	16	12	11	11
AC-FT	2170	1340	1070	1110	1990	2570	1720	2870	3850	1970	1900	2660

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2002, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	
MEAN	38.0	25.8	20.4	17.8	29.1	39.0	59.2	80.4	78.3	110	103	62.4
MAX	107	49.0	35.5	27.7	102	124	168	150	137	260	204	162
(WY)	1998	1998	1998	1997	1997	1997	1999	2001	1995	1997	1997	1997
MIN	17.8	16.8	13.3	12.9	14.6	13.6	25.2	46.1	33.9	32.0	30.9	16.9
(WY)	1993	1995	1995	1995	1995	1995	1996	1993	1996	2002	2002	1992

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1992 - 2002

ANNUAL TOTAL	21254	12709	
ANNUAL MEAN	58.2	34.8	56.0
HIGHEST ANNUAL MEAN			99.9
LOWEST ANNUAL MEAN			34.8
HIGHEST DAILY MEAN	1040	May 5	275
LOWEST DAILY MEAN	12	Jan 8	11
ANNUAL SEVEN-DAY MINIMUM	13	Jan 2	12
MAXIMUM PEAK FLOW			1510
MAXIMUM PEAK STAGE			5.96
ANNUAL RUNOFF (AC-FT)	42160	25210	40600
10 PERCENT EXCEEDS	122	70	123
50 PERCENT EXCEEDS	39	23	31
90 PERCENT EXCEEDS	15	15	14

e Estimated.

a From rating curve extended above 500 ft³/s.

b Maximum gage height, 13.18 ft, Jul 31, 1999, backwater from construction, site and datum then in use.

06714800 LEAVENWORTH CREEK AT MOUTH NEAR GEORGETOWN, CO

LOCATION.--Lat 39°41'14", long 105°41'59", in NE¹/₄SW¹/₄ sec.20, T.4 S., R.74 W., Clear Creek County, Hydrologic Unit 10190004, on left bank 400 ft upstream from confluence of South Clear Creek, 0.3 mi south of Georgetown Reservoir, and 1.3 mi south of Georgetown.

DRAINAGE AREA.--12.0 mi².

PERIOD OF RECORD.--October 1994 to September 2000. October 2000 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,280 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Vidler tunnel (transmountain diversion) imports water from Peru Creek. There is seasonal diversion into Green Lake. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 168 ft³/s, July 12, 1995, gage height, 4.79 ft; minimum daily, 1.2 ft³/s, Feb. 12, 1995.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 23 ft³/s, May 30, gage height 4.09 ft; minimum daily, 2.7 ft³/s, July 31-Aug. 1, Sept 4, 6-7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.6	---	---	---	---	---	e3.5	7.1	18	6.1	2.7	2.8
2	9.4	---	---	---	---	---	e3.6	6.0	18	5.9	2.9	2.8
3	9.1	---	---	---	---	---	e3.7	5.9	17	5.9	3.6	2.8
4	9.0	---	---	---	---	---	e3.8	6.1	16	6.3	5.1	2.7
5	8.8	---	---	---	---	---	4.0	7.0	15	6.1	5.8	2.8
6	8.6	---	---	---	---	---	4.0	7.7	17	5.8	8.4	2.7
7	e7.0	---	---	---	---	---	3.6	8.3	17	5.4	7.6	2.7
8	e6.4	---	---	---	---	---	3.9	7.9	17	5.1	6.2	3.2
9	e6.4	---	---	---	---	---	4.8	6.6	16	5.0	4.7	4.0
10	e6.3	---	---	---	---	---	5.7	6.0	16	5.0	4.0	5.4
11	e6.5	---	---	---	---	---	5.2	6.3	15	4.8	3.7	3.8
12	e6.2	---	---	---	---	---	5.0	6.5	14	4.2	3.6	4.0
13	e6.2	---	---	---	---	---	5.8	7.4	13	3.9	3.6	4.5
14	e5.4	---	---	---	---	---	6.4	8.2	13	3.9	3.4	3.8
15	e6.4	---	---	---	---	---	6.6	8.1	13	3.7	3.3	3.5
16	e6.4	---	---	---	---	---	5.7	8.5	12	3.5	3.2	3.4
17	e6.4	---	---	---	---	---	4.8	8.7	11	3.3	3.1	3.3
18	e6.4	---	---	---	---	---	5.4	10	11	3.3	3.0	3.7
19	e5.0	---	---	---	---	---	5.3	12	10	3.2	3.2	4.2
20	e6.8	---	---	---	---	---	4.6	12	9.8	3.2	3.5	3.8
21	e6.8	---	---	---	---	---	3.8	13	10	3.4	3.5	3.6
22	e6.8	---	---	---	---	---	4.2	11	9.6	3.2	3.8	3.4
23	e4.8	---	---	---	---	---	4.5	9.2	8.9	3.6	3.4	3.4
24	e4.6	---	---	---	---	---	5.5	9.1	8.5	4.7	3.2	3.3
25	e4.4	---	---	---	---	---	5.5	9.8	8.2	3.6	3.0	3.4
26	e5.0	---	---	---	---	---	6.2	12	8.1	5.6	3.0	4.6
27	e5.0	---	---	---	---	---	6.2	12	7.6	3.5	3.0	4.6
28	e5.6	---	---	---	---	---	5.8	12	7.7	3.2	3.3	4.5
29	e6.6	---	---	---	---	---	6.9	13	7.9	2.9	3.3	4.3
30	e6.6	---	---	---	---	---	7.7	15	6.5	2.8	3.4	4.2
31	e5.6	---	---	---	---	---	---	19	---	2.7	3.0	---
TOTAL	204.1	---	---	---	---	---	151.7	291.4	371.8	132.8	120.5	109.2
MEAN	6.584	---	---	---	---	---	5.057	9.400	12.39	4.284	3.887	3.640
MAX	9.6	---	---	---	---	---	7.7	19	18	6.3	8.4	5.4
MIN	4.4	---	---	---	---	---	3.5	5.9	6.5	2.7	2.7	2.7
AC-FT	405	---	---	---	---	---	301	578	737	263	239	217

e Estimated.

394308105413800 CLEAR CREEK ABOVE GEORGETOWN LAKE NEAR GEORGETOWN, CO

LOCATION.--Lat 39°43'08", long 105°41'38", in SW $\frac{1}{4}$ NE $\frac{1}{4}$, sec.8, T.4 S., R.74 W., Clear Creek County, Hydrologic Unit 10190004, on left bank 300 ft upstream from Georgetown Lake, and 1.0 mi north of Georgetown.

DRAINAGE AREA.--80.0 mi².

PERIOD OF RECORD.--July 1997 to September 1999, October 1999 to current year (seasonal records only).

GAGE.--Water-stage recorder. Elevation of gage is 8,460 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 726 ft³/s, Jul 28, 1999, gage height 5.78 ft; minimum daily, 9.0 ft³/s (estimated), Feb. 5, 1999.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 187 ft³/s, May 30, gage height, 3.78 ft; minimum daily, 13 ft³/s, Sept. 5-6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	---	---	---	---	---	22	46	120	50	23	16
2	51	---	---	---	---	---	23	38	122	49	24	15
3	50	---	---	---	---	---	27	36	116	48	24	14
4	46	---	---	---	---	---	24	39	102	49	30	14
5	48	---	---	---	---	---	27	42	92	50	33	13
6	44	---	---	---	---	---	25	49	103	46	58	13
7	46	---	---	---	---	---	25	58	110	44	60	14
8	47	---	---	---	---	---	25	58	112	44	46	16
9	45	---	---	---	---	---	28	45	115	43	39	21
10	47	---	---	---	---	---	34	44	113	42	38	32
11	43	---	---	---	---	---	31	44	107	40	32	21
12	41	---	---	---	---	---	30	49	98	36	34	22
13	44	---	---	---	---	---	33	42	92	34	30	23
14	46	---	---	---	---	---	39	49	88	35	29	22
15	46	---	---	---	---	---	40	48	82	31	27	19
16	41	---	---	---	---	---	38	53	80	31	24	18
17	43	---	---	---	---	---	31	50	80	28	23	17
18	44	---	---	---	---	---	34	62	78	29	22	19
19	40	---	---	---	---	---	34	74	75	26	21	20
20	42	---	---	---	---	---	33	80	77	28	24	20
21	43	---	---	---	---	---	24	92	75	36	22	17
22	43	---	---	---	---	---	25	76	73	29	24	17
23	41	---	---	---	---	---	26	60	69	37	24	15
24	33	---	---	---	---	---	31	55	68	36	20	15
25	33	---	---	---	---	---	34	57	64	30	18	15
26	35	---	---	---	---	---	35	63	64	37	17	23
27	36	---	---	---	---	---	35	65	60	30	17	24
28	42	---	---	---	---	---	30	73	57	27	17	24
29	41	---	---	---	---	---	35	88	59	26	17	22
30	43	---	---	---	---	---	44	113	53	24	22	24
31	40	---	---	---	---	---	---	130	---	23	17	---
TOTAL	1336	---	---	---	---	---	922	1878	2604	1118	856	565
MEAN	43.1	---	---	---	---	---	30.7	60.6	86.8	36.1	27.6	18.8
MAX	52	---	---	---	---	---	44	130	122	50	60	32
MIN	33	---	---	---	---	---	22	36	53	23	17	13
AC-FT	2650	---	---	---	---	---	1830	3730	5170	2220	1700	1120

394359105411900 CLEAR CREEK BELOW GEORGETOWN LAKE NEAR GEORGETOWN, CO

LOCATION.--Lat 39°43'59", long 105°41'19", in SE¹/₄NE¹/₄, sec.5, T.4 S., R.74 W., Clear Creek County, Hydrologic Unit 10190004, on left bank 30 ft upstream from spillway on Georgetown Lake, and 2.0 mi north of Georgetown.

DRAINAGE AREA.--82.4 mi².

PERIOD OF RECORD.--July 1997 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 8,450 ft above sea level, from topographic map.

REMARKS.--Records poor. No discharge data available from Apr. 3 to Sept. 30, due to diversions which bypass spillway. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 604 ft³/s, June 25, 1999, gage height, 4.58 ft.; minimum daily, 8.2 ft³/s, Feb. 5, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during the period of October to April, not determined; minimum daily, 15 ft³/s, Feb. 23-24, 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	e33	24	20	19	16	25	---	---	---	---	---
2	42	33	24	18	18	17	25	---	---	---	---	---
3	42	35	23	18	19	e17	---	---	---	---	---	---
4	38	35	23	19	19	16	---	---	---	---	---	---
5	39	34	e24	18	19	16	---	---	---	---	---	---
6	34	34	e23	18	18	16	---	---	---	---	---	---
7	35	34	23	17	18	16	---	---	---	---	---	---
8	34	35	22	e19	e19	17	---	---	---	---	---	---
9	e34	28	23	20	e18	16	---	---	---	---	---	---
10	34	28	22	21	18	17	---	---	---	---	---	---
11	e29	31	23	20	17	17	---	---	---	---	---	---
12	30	33	22	e22	16	17	---	---	---	---	---	---
13	e30	31	20	e20	16	17	---	---	---	---	---	---
14	e27	32	e21	20	e16	18	---	---	---	---	---	---
15	34	30	20	22	16	16	---	---	---	---	---	---
16	32	30	20	23	16	16	---	---	---	---	---	---
17	33	30	20	21	16	16	---	---	---	---	---	---
18	e32	29	20	23	16	16	---	---	---	---	---	---
19	e33	27	21	21	17	18	---	---	---	---	---	---
20	e32	25	20	e21	16	17	---	---	---	---	---	---
21	35	e26	20	21	17	18	---	---	---	---	---	---
22	e34	e25	20	20	e17	20	---	---	---	---	---	---
23	e33	24	20	20	15	19	---	---	---	---	---	---
24	e32	e25	19	18	15	18	---	---	---	---	---	---
25	e31	24	21	e19	16	18	---	---	---	---	---	---
26	29	21	20	e20	e15	18	---	---	---	---	---	---
27	28	19	20	21	e16	e19	---	---	---	---	---	---
28	e34	18	e22	22	16	e20	---	---	---	---	---	---
29	36	22	19	21	---	21	---	---	---	---	---	---
30	37	e25	19	21	---	e22	---	---	---	---	---	---
31	e33	---	19	19	---	22	---	---	---	---	---	---
TOTAL	1050	856	657	623	474	547	---	---	---	---	---	---
MEAN	33.9	28.5	21.2	20.1	16.9	17.6	---	---	---	---	---	---
MAX	44	35	24	23	19	22	---	---	---	---	---	---
MIN	27	18	19	17	15	16	---	---	---	---	---	---
AC-FT	2080	1700	1300	1240	940	1080	---	---	---	---	---	---

e Estimated.

06715000 CLEAR CREEK ABOVE WEST FORK CLEAR CREEK NEAR EMPIRE, CO

LOCATION.--Lat 39°45'07", long 105°39'41", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.34, T.3 S., R.74 W., Clear Creek County, Hydrologic Unit 10190004, on left bank, 1.1 mi west of exit 232 on I-70, 1.3 mi southeast of Empire, and 2.1 mi west of Lawson.

DRAINAGE AREA.--86.1 mi².

PERIOD OF RECORD.--October 1994 to September 2000. October 2000 to current year (seasonal records only).

GAGE.--Water-stage recorder. Elevation of gage is 8,280 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1030 ft³/s, June 17, 1995, gage height, 6.63 ft; minimum daily, 8.5 ft³/s (estimated), Mar. 8, 1997.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 163 ft³/s, May 31, gage height, 4.41 ft; minimum daily, 13 ft³/s, Sept. 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	---	---	---	---	e20	22	49	115	47	27	21
2	43	---	---	---	---	e18	22	44	111	45	25	19
3	43	---	---	---	---	e19	24	38	114	46	24	20
4	39	---	---	---	---	e20	24	41	99	47	33	26
5	40	---	---	---	---	e22	25	44	86	47	34	27
6	37	---	---	---	---	e21	26	49	94	45	61	20
7	e35	---	---	---	---	e19	26	57	102	43	61	20
8	e35	---	---	---	---	e19	24	59	103	41	51	21
9	e35	---	---	---	---	e21	28	49	106	40	43	22
10	e35	---	---	---	---	e18	31	46	106	44	39	30
11	e35	---	---	---	---	e18	31	44	101	39	33	43
12	e35	---	---	---	---	e19	29	53	92	31	36	44
13	e35	---	---	---	---	e20	30	42	87	31	33	38
14	e34	---	---	---	---	20	37	50	85	35	33	25
15	e36	---	---	---	---	17	39	46	82	31	29	21
16	e36	---	---	---	---	17	41	54	78	27	30	21
17	e36	---	---	---	---	18	31	49	78	27	28	19
18	e34	---	---	---	---	20	35	59	75	27	28	18
19	e32	---	---	---	---	19	36	71	72	25	25	19
20	e34	---	---	---	---	17	37	76	73	27	28	20
21	e36	---	---	---	---	17	31	89	79	33	26	20
22	e36	---	---	---	---	19	29	77	72	28	29	19
23	e34	---	---	---	---	19	28	62	69	36	29	17
24	e32	---	---	---	---	18	32	60	65	35	27	13
25	e30	---	---	---	---	17	35	53	54	29	23	17
26	e35	---	---	---	---	17	38	62	64	36	22	18
27	e34	---	---	---	---	18	39	64	63	33	22	21
28	e36	---	---	---	---	17	33	67	57	28	22	23
29	e38	---	---	---	---	19	34	83	44	25	23	26
30	e39	---	---	---	---	19	44	101	51	27	28	27
31	e36	---	---	---	---	19	---	128	---	23	22	---
TOTAL	1120	---	---	---	---	581	941	1866	2477	1078	974	695
MEAN	36.13	---	---	---	---	18.74	31.37	60.19	82.57	34.77	31.42	23.17
MAX	45	---	---	---	---	22	44	128	115	47	61	44
MIN	30	---	---	---	---	17	22	38	44	23	22	13
AC-FT	2220	---	---	---	---	1150	1870	3700	4910	2140	1930	1380

e Estimated.

06716100 WEST FORK CLEAR CREEK ABOVE MOUTH NEAR EMPIRE, CO

LOCATION.--Lat 39°45'32", long 105°39'34", in NE¹/₄SW¹/₄ sec.27, T.3 S., R.74 W., Clear Creek County, Hydrologic Unit 10190004, on left bank, 75 ft downstream from frontage road bridge and 1.2 mi east of Empire.

DRAINAGE AREA.--57.6 mi².

PERIOD OF RECORD.--October 1994 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,235 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by transbasin diversions. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	e24	e13	e18	e21	e21	20	37	144	e57	34	19
2	31	e23	e15	e17	e20	e20	21	30	155	e55	33	18
3	30	e23	e15	e18	e19	e21	25	32	164	e52	33	18
4	30	e22	e15	e17	e20	e21	25	33	152	e50	35	17
5	32	e22	e16	e18	e23	e22	25	34	134	e49	43	18
6	29	e21	e15	e18	e21	e20	28	37	132	e47	53	17
7	28	e21	e15	e17	e18	e19	26	42	137	e46	44	17
8	29	e22	e16	e16	e18	e18	24	45	141	e45	35	17
9	29	e20	e20	e15	e19	e18	26	42	140	e44	30	19
10	32	e17	e19	e15	e20	e20	27	40	147	e43	28	24
11	30	e18	e18	e14	e21	e19	27	43	140	e44	28	22
12	29	e19	e18	e15	e19	e18	25	46	e130	e43	31	22
13	31	e18	e18	e15	e19	e18	25	42	e125	e42	30	23
14	32	e18	e21	e15	e20	17	27	42	e120	e43	36	22
15	31	e17	e21	e17	e20	19	29	42	e110	e42	45	21
16	30	e17	e20	e18	e19	20	31	45	e105	e41	45	19
17	30	e16	e19	e19	e19	22	27	47	e100	e44	45	18
18	30	e16	e19	e20	e19	22	28	48	e96	e48	40	20
19	31	e15	e18	e19	e18	22	29	53	e94	e46	37	21
20	29	e14	e17	e20	e18	22	29	65	e92	e45	37	19
21	28	e14	e16	e20	e18	22	27	81	e94	e48	28	19
22	30	e15	e15	e18	e19	21	25	81	e90	e50	26	19
23	32	e16	e16	e19	e19	20	25	74	e86	47	25	19
24	27	e15	e17	e20	e18	20	25	72	e78	45	26	19
25	e23	e13	e18	e19	e20	20	26	71	e72	43	23	19
26	e24	e12	e18	e18	e21	19	28	68	e71	41	22	25
27	e25	e13	e19	e17	e19	19	29	63	e68	37	22	23
28	e26	e13	e20	e16	e21	19	26	69	e65	36	19	24
29	e25	e14	e20	e15	---	20	26	81	e64	38	22	23
30	e24	e14	e19	e17	---	21	31	105	e59	35	23	22
31	e23	---	e19	e19	---	21	---	137	---	34	20	---
TOTAL	893	522	545	539	546	621	792	1747	3305	1380	998	603
MEAN	28.8	17.4	17.6	17.4	19.5	20.0	26.4	56.4	110	44.5	32.2	20.1
MAX	33	24	21	20	23	22	31	137	164	57	53	25
MIN	23	12	13	14	18	17	20	30	59	34	19	17
AC-FT	1770	1040	1080	1070	1080	1230	1570	3470	6560	2740	1980	1200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2002, BY WATER YEAR (WY)

	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	31.4	24.0	19.5	16.5	15.6	15.9	23.6	126
MAX	41.5	30.1	26.1	23.5	20.1	20.0	35.2	199
(WY)	2000	2001	1999	1999	2000	2002	2000	1997
MIN	22.0	15.9	10.4	9.92	11.1	12.7	15.3	47.2
(WY)	1995	1995	1995	1995	1995	1998	1995	1995

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1995 - 2002

ANNUAL TOTAL	29711.8	12491	
ANNUAL MEAN	81.4	34.2	78.0
HIGHEST ANNUAL MEAN			96.2 1999
LOWEST ANNUAL MEAN			34.2 2002
HIGHEST DAILY MEAN	464	Jun 3	720 Jun 18 1995
LOWEST DAILY MEAN	e9.4	Jan 9	e9.4 Jan 9 2001
ANNUAL SEVEN-DAY MINIMUM	e11	Jan 3	e13 Nov 25 9.6 Jan 14 1995
MAXIMUM PEAK FLOW			191 Jun 2 774 Jun 18 1995
MAXIMUM PEAK STAGE		5.17 Jun 2	6.67 Jun 18 1995
ANNUAL RUNOFF (AC-FT)	58930	24780	56480
10 PERCENT EXCEEDS	275	68	242
50 PERCENT EXCEEDS	26	23	28
90 PERCENT EXCEEDS	14	17	13

e Estimated.

PLATTE RIVER BASIN

06716500 CLEAR CREEK NEAR LAWSON, CO

LOCATION.--Lat 39°45'57", long 105°37'32", in NW¹/₄NW¹/₄ sec.25, T.3 S., R.74 W., Clear Creek County, Hydrologic Unit 10190004, at east edge of Lawson, on left bank, 30 ft downstream from private bridge, and 2.0 mi downstream from West Fork Clear Creek.

DRAINAGE AREA.--147 mi².

PERIOD OF RECORD.--March 1946 to September 1986; October 1994 to current year. Records prior to 1959 include inflow from August P. Gumlick Tunnel (formerly Jones Pass tunnel).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,080 ft above sea level, from topographic map. Mar. 29, 1946 to Sept. 30, 1967, at site 1.5 mi upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow affected by minor transmountain diversion from Colorado River basin through Berthoud Pass ditch (see elsewhere in this report). Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	56	e34	34	e30	e24	37	74	229	100	47	35
2	74	54	e36	29	e29	e22	39	68	230	96	47	34
3	71	53	e34	32	30	e25	42	65	235	96	47	34
4	69	50	32	30	28	e28	45	65	222	95	54	37
5	70	50	29	e32	e28	e32	44	68	203	91	59	38
6	67	51	29	32	e28	33	47	75	208	86	95	35
7	65	50	28	28	26	30	46	92	215	84	84	34
8	65	52	26	24	26	30	44	98	218	82	69	36
9	65	43	31	24	27	e30	47	86	220	77	58	38
10	67	41	26	24	e28	30	50	82	222	77	53	46
11	66	44	25	23	e28	30	52	82	217	80	49	57
12	65	47	24	23	28	30	49	96	207	66	50	56
13	65	45	28	24	e28	30	51	81	197	63	49	55
14	70	45	e39	e23	29	31	56	93	187	64	51	46
15	67	43	35	e23	30	28	58	88	173	61	56	42
16	64	42	e32	e24	29	28	63	97	167	59	57	41
17	65	42	e29	30	29	28	52	96	166	61	57	39
18	66	41	25	32	29	29	56	104	159	62	53	39
19	60	39	e24	e28	29	30	57	120	153	61	49	41
20	60	35	e23	e29	29	29	57	137	152	59	50	40
21	61	36	23	e30	29	29	53	164	158	66	45	39
22	63	38	22	e30	29	31	51	153	141	63	44	40
23	66	33	e22	31	30	33	49	134	135	68	43	38
24	53	31	e23	e30	30	31	52	131	131	68	42	34
25	52	e32	e25	e32	29	31	54	123	120	61	40	36
26	54	e30	e28	35	e27	31	57	129	127	64	38	41
27	56	e29	e32	31	e25	31	60	124	124	58	37	42
28	59	e32	e33	24	e23	30	55	132	115	55	36	43
29	58	e34	e34	24	---	32	54	158	104	51	38	44
30	58	e34	35	25	---	34	65	192	101	51	42	44
31	58	---	34	30	---	34	---	232	---	46	37	---
TOTAL	1975	1252	900	870	790	924	1542	3439	5236	2171	1576	1224
MEAN	63.71	41.73	29.03	28.06	28.21	29.81	51.40	110.9	174.5	70.03	50.84	40.80
MAX	76	56	39	35	30	34	65	232	235	100	95	57
MIN	52	29	22	23	23	22	37	65	101	46	36	34
AC-FT	3920	2480	1790	1730	1570	1830	3060	6820	10390	4310	3130	2430

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2002, BY WATER YEAR (WY)

MEAN	61.12	43.50	34.10	29.11	27.77	28.25	43.27	196.8	596.5	397.8	171.1	89.45
MAX	132	79.9	52.2	41.0	37.3	39.0	89.1	431	1000	943	404	193
(WY)	1962	1985	2000	1971	2000	2000	1962	1958	1952	1957	1984	1984
MIN	35.6	30.2	24.5	18.2	16.8	17.6	26.3	83.4	175	70.0	50.8	40.8
(WY)	1957	1961	1955	1955	1955	1951	1964	1995	2002	2002	2002	2002

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1946 - 2002
ANNUAL TOTAL	47268	21899	
ANNUAL MEAN	129.5	60.00	144.0
HIGHEST ANNUAL MEAN			225
LOWEST ANNUAL MEAN			60.0
HIGHEST DAILY MEAN	574	Jun 8	235
LOWEST DAILY MEAN	22	Jan 17	22
ANNUAL SEVEN-DAY MINIMUM	23	Dec 18	23
MAXIMUM PEAK FLOW		252	May 30
MAXIMUM PEAK STAGE		a3.68	May 30
ANNUAL RUNOFF (AC-FT)	93760	43440	104300
10 PERCENT EXCEEDS	384	124	412
50 PERCENT EXCEEDS	60	45	50
90 PERCENT EXCEEDS	30	28	26

e Estimated.

b Site and datum then in use.

a Maximum gage-height, 4.35 ft, Dec 26, backwater from ice.

06717400 CHICAGO CREEK BELOW DEVILS CANYON, NEAR IDAHO SPRINGS, CO

LOCATION.--Lat 39°42'59", long 105°34'15", in NW¹/₄SW¹/₄ sec.9, T.4 S., R.73 W., Clear Creek County, Hydrologic Unit 10190004, on left bank, 50 ft upstream from Highway 103 bridge, 5.6 mi upstream from intersection of I-70 and Colorado Highway 103, and 3.2 mi southwest of Idaho Springs.

DRAINAGE AREA.--43.7 mi².

PERIOD OF RECORD.--October 1994 to September 1999. October 1999 to current year (seasonal records only). Records for May 14, 1996 (when gage was located 700 ft upstream) to April 10, 1998, may not be equivalent to other records because gage was moved upstream of inflow from Devils Canyon.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,040 ft above sea level, from topographic map. Prior to May 14, 1996, at site 150 ft downstream at different datum. May 14, 1996 to Apr. 10, 1998, at site 700 ft upstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 175 ft³/s, June 8, 1997, gage height 6.51 ft; minimum daily, 0.30 ft³/s (estimated), Nov. 13, 14, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 19 ft³/s, June 28, gage height, 5.01 ft; minimum daily, 0.62 ft³/s, Aug. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	---	---	---	---	---	6.9	5.8	7.3	14	0.62	3.0
2	14	---	---	---	---	---	6.3	3.1	7.4	13	1.9	2.5
3	13	---	---	---	---	---	7.8	2.3	7.8	14	3.1	2.7
4	13	---	---	---	---	---	9.7	2.7	12	12	7.3	2.0
5	13	---	---	---	---	---	14	2.9	12	5.4	6.5	2.8
6	12	---	---	---	---	---	13	3.3	12	e5.8	8.1	2.6
7	13	---	---	---	---	---	14	3.9	10	e7.0	6.5	2.6
8	13	---	---	---	---	---	13	3.6	9.7	e8.2	7.8	2.8
9	13	---	---	---	---	---	13	1.7	9.0	7.9	6.0	3.8
10	13	---	---	---	---	---	14	2.1	9.2	7.5	4.7	7.3
11	e12	---	---	---	---	---	14	2.1	10	9.0	5.3	4.9
12	e12	---	---	---	---	---	14	4.0	e9.0	7.2	5.3	5.3
13	e12	---	---	---	---	---	14	3.5	e8.0	4.5	7.2	5.8
14	e12	---	---	---	---	---	15	5.9	e6.0	3.8	6.2	5.2
15	e12	---	---	---	---	---	13	4.9	e5.0	2.9	5.7	4.7
16	e12	---	---	---	---	---	9.7	5.1	e3.8	e2.7	5.5	4.3
17	e12	---	---	---	---	---	7.6	6.7	e3.2	e1.5	5.5	3.9
18	e12	---	---	---	---	---	7.6	6.5	e2.9	e1.0	5.0	4.4
19	e12	---	---	---	---	---	7.3	6.4	e2.8	e1.2	4.6	5.8
20	e12	---	---	---	---	---	7.0	6.2	e2.7	e1.1	4.8	5.8
21	e12	---	---	---	---	---	6.1	8.1	e2.9	e1.0	3.2	5.5
22	e12	---	---	---	---	---	5.8	7.3	e3.1	e1.2	3.6	5.4
23	e11	---	---	---	---	---	6.2	4.2	e3.2	1.3	3.2	5.4
24	e11	---	---	---	---	---	6.7	3.8	3.1	1.3	2.9	5.7
25	e11	---	---	---	---	---	6.8	6.7	3.5	0.92	2.9	5.3
26	e11	---	---	---	---	---	7.5	10	4.7	1.2	2.6	7.1
27	e11	---	---	---	---	---	7.4	10	10	1.3	3.1	7.7
28	e11	---	---	---	---	---	6.4	9.6	12	1.4	3.1	7.3
29	e11	---	---	---	---	6.0	6.6	9.0	15	1.3	3.5	6.9
30	e11	---	---	---	---	5.9	7.2	7.8	14	1.3	3.6	6.8
31	e11	---	---	---	---	6.4	---	7.5	---	0.82	3.1	---
TOTAL	374	---	---	---	---	---	287.6	166.7	221.3	142.74	142.42	145.3
MEAN	12.1	---	---	---	---	---	9.59	5.38	7.38	4.60	4.59	4.84
MAX	14	---	---	---	---	---	15	10	15	14	8.1	7.7
MIN	11	---	---	---	---	---	5.8	1.7	2.7	0.82	0.62	2.0
AC-FT	742	---	---	---	---	---	570	331	439	283	282	288

e Estimated.

06718300 CLEAR CREEK ABOVE JOHNSON GULCH NEAR IDAHO SPRINGS, CO

LOCATION.--Lat 39°44'47", long 105°26'08", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.34, T.3 S., R.72 W., Clear Creek County, Hydrologic Unit 10190004, on left bank 150 ft downstream from I-70 exit 243 bridge over Clear Creek, and 2 mi east of Idaho Springs.

DRAINAGE AREA.--267 mi².

PERIOD OF RECORD.--October 1994 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,210 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges which are poor. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	82	e39	e30	e27	e30	46	93	274	149	74	58
2	119	79	e41	e29	e32	e31	47	88	270	140	73	56
3	117	78	e38	e28	e31	e32	48	85	289	141	74	54
4	114	75	e35	e32	e30	e33	53	88	290	142	86	56
5	117	75	e33	e29	e28	e32	56	92	250	131	86	59
6	117	76	e32	e28	e30	e29	58	98	245	122	122	57
7	115	76	e31	e34	e29	e29	58	110	255	123	105	54
8	115	80	e30	e32	e28	e28	57	118	256	119	96	56
9	115	69	e32	e31	e27	e27	59	107	258	113	84	61
10	116	66	e31	e29	e26	e29	63	106	259	110	76	74
11	114	71	e32	e28	e29	e35	65	106	252	116	73	75
12	113	74	e32	e29	e31	e33	63	122	238	96	73	75
13	114	74	e33	e30	e30	e35	64	108	225	96	75	73
14	118	70	e34	e26	e33	e32	71	121	211	96	75	67
15	115	e70	e37	e27	e34	e29	73	114	201	91	77	61
16	104	e62	e32	e28	e35	e27	75	123	192	86	77	59
17	103	e58	e34	e28	e35	e25	65	124	193	88	75	57
18	103	e57	e33	e29	e35	e28	68	130	185	89	72	58
19	97	e54	e29	e30	e36	e31	70	143	181	89	68	61
20	97	e50	e32	e31	e36	e32	71	157	200	86	73	60
21	96	e52	e33	e32	e35	e31	68	184	208	92	68	59
22	97	e54	e31	e31	e34	e40	65	179	197	91	66	58
23	96	e50	e30	e31	e33	e42	65	165	185	96	63	57
24	85	e47	e29	e30	e31	41	69	169	179	97	61	54
25	82	e46	e30	e31	e28	39	71	159	171	89	60	57
26	83	e43	e31	e31	e27	40	76	169	161	92	58	62
27	85	e42	e32	e32	e25	41	80	165	169	86	58	64
28	87	e40	e33	e30	e29	40	74	165	166	83	58	65
29	90	e39	e33	e29	---	41	74	186	158	77	60	66
30	87	e40	e32	e29	---	43	87	213	146	78	64	66
31	85	---	e31	e28	---	44	---	272	---	74	60	---
TOTAL	3224	1849	1015	922	864	1049	1959	4259	6464	3178	2290	1839
MEAN	104	61.6	32.7	29.7	30.9	33.8	65.3	137	215	103	73.9	61.3
MAX	128	82	41	34	36	44	87	272	290	149	122	75
MIN	82	39	29	26	25	25	46	85	146	74	58	54
AC-FT	6390	3670	2010	1830	1710	2080	3890	8450	12820	6300	4540	3650

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2002, BY WATER YEAR (WY)

MEAN	105	67.1	51.0	43.3	41.2	46.1	73.2	342	824	554	277	150
MAX	126	83.6	62.6	54.6	54.7	58.8	106	549	1325	1398	526	213
(WY)	1999	2000	2000	1996	2000	2000	2000	1996	1995	1995	1999	1999
MIN	65.0	49.6	32.7	29.7	30.5	33.8	49.9	137	215	103	73.9	61.3
(WY)	1995	1995	2002	2002	1995	2002	1995	2002	2002	2002	2002	2002

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1995 - 2002	
ANNUAL TOTAL	59970		28912			
ANNUAL MEAN	164		79.2		215	
HIGHEST ANNUAL MEAN					326 1995	
LOWEST ANNUAL MEAN					79.2 2002	
HIGHEST DAILY MEAN	e625	Jun 9	290	Jun 4	2080	Jun 22 1995
LOWEST DAILY MEAN	29	Dec 19	e25	Feb 27	a,e25	Feb 27 2002
ANNUAL SEVEN-DAY MINIMUM	31	Dec 19	e28	Jan 11	27	Feb 13 1995
MAXIMUM PEAK FLOW			338	Jun 4	2250	Jun 21 1995
MAXIMUM PEAK STAGE			4.78	Jun 4	b7.46	Jun 21 1995
ANNUAL RUNOFF (AC-FT)	119000		57350		155900	
10 PERCENT EXCEEDS	482		165		582	
50 PERCENT EXCEEDS	85		65		82	
90 PERCENT EXCEEDS	39		29		39	

e Estimated.

b Maximum gage height, 8.23 ft, Jun 17, 1995.

a Also occurred Mar 17, 2002.

06718550 NORTH CLEAR CREEK ABOVE MOUTH NEAR BLACKHAWK, CO

LOCATION.--Lat 39°44'56", long 105°23'57", in NE¹/₄SW¹/₄ sec.36, T.3 S., R.72 W., Clear Creek County, Hydrologic Unit 10190004, on left bank 150 ft upstream from intersection of Hwy 6 and Hwy 119 bridge over North Clear Creek, 0.2 mi above mouth, and 6.5 mi southeast of Blackhawk.

DRAINAGE AREA.--59.4 mi².

PERIOD OF RECORD.--October 1994 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,910 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.9	e3.6	e3.4	e4.7	e3.0	e3.4	6.4	9.5	11	6.0	e3.1	2.5
2	5.5	e3.2	e3.6	e4.0	e3.7	e3.3	6.9	9.5	11	6.1	e2.9	2.5
3	5.2	e3.2	e3.9	e3.8	e3.4	e3.1	6.6	9.5	11	11	e4.0	2.3
4	5.1	e3.2	e3.8	e4.4	e3.5	e3.6	6.8	9.4	25	12	6.7	2.2
5	5.0	e3.1	e3.5	e4.8	e3.2	e3.4	7.8	9.4	19	12	5.4	2.1
6	5.2	e3.1	e3.3	e4.0	e3.0	e3.2	8.4	9.3	15	12	7.5	2.2
7	4.9	e3.0	e3.2	e5.2	e3.3	e3.0	8.6	9.6	13	12	5.7	2.3
8	4.8	e3.0	e3.1	e4.3	e3.2	e2.7	8.3	9.7	13	11	4.8	2.3
9	4.6	e3.1	e3.2	e4.0	e3.0	e2.5	9.2	9.7	13	11	3.9	2.9
10	4.6	e2.8	e3.1	e4.2	e2.6	e3.0	9.4	9.9	13	11	e3.7	8.0
11	4.9	e3.0	e3.0	e3.8	e3.0	e3.3	9.4	9.9	12	6.5	e3.4	4.7
12	4.6	e3.1	e3.2	e3.7	e3.5	e3.1	8.9	12	11	4.9	e3.0	7.2
13	4.3	e2.8	e3.5	e3.6	e2.9	e3.0	9.1	11	11	4.5	e2.7	5.8
14	4.5	e2.9	e4.0	e4.3	e3.0	e3.7	10	12	11	e4.5	e2.5	4.3
15	4.8	e2.9	e4.2	e4.0	e3.1	e3.7	9.8	11	11	e4.5	2.5	3.6
16	4.2	e3.0	e4.4	e4.2	e3.2	e3.4	9.4	11	11	e4.5	2.4	3.2
17	4.1	e3.2	e4.7	e4.3	e3.2	e3.2	8.5	12	9.9	e4.4	2.4	3.0
18	4.0	e3.2	e4.9	e4.7	e3.1	e3.5	9.3	12	9.3	e4.3	2.4	3.0
19	3.8	e3.3	e5.4	e4.5	e3.0	e3.7	9.3	11	8.8	e4.2	2.3	4.9
20	3.7	e3.1	e5.9	e4.3	e3.2	e3.5	8.8	11	8.7	e4.0	2.3	3.5
21	3.6	e3.2	e6.0	e4.1	e3.2	e3.4	7.8	11	8.8	e3.8	2.4	3.3
22	3.6	e3.4	e5.6	e4.0	e3.2	e3.3	7.8	10	8.8	e3.7	2.5	3.2
23	3.5	e3.3	e5.0	e4.2	e3.2	3.4	8.3	11	8.1	e3.6	2.5	3.1
24	3.3	e3.2	e4.3	e4.4	e3.0	3.4	8.6	15	7.7	e3.6	2.6	3.2
25	e3.3	e3.2	e4.0	e4.3	e2.8	3.1	8.8	15	7.5	e3.5	2.5	3.2
26	e3.0	e3.1	e4.6	e4.0	e2.5	3.8	8.6	16	7.3	e3.7	2.4	4.3
27	e3.2	e2.9	e5.0	e4.2	e2.1	3.6	9.3	14	7.5	e3.6	2.5	4.3
28	e3.5	e3.0	e5.0	e4.5	e3.1	4.1	8.6	12	7.1	e3.6	2.7	4.1
29	e4.2	e3.1	e5.1	e4.0	---	4.4	8.8	11	6.9	e3.5	2.9	3.9
30	e4.0	e3.4	e4.8	e3.7	---	5.6	9.1	11	6.3	e3.4	3.1	3.5
31	e3.8	---	e4.3	e3.3	---	5.9	---	11	---	e3.3	2.7	---
TOTAL	132.7	93.6	131.0	129.5	86.2	109.3	256.6	345.4	323.7	189.7	102.4	108.6
MEAN	4.28	3.12	4.23	4.18	3.08	3.53	8.55	11.1	10.8	6.12	3.30	3.62
MAX	5.9	3.6	6.0	5.2	3.7	5.9	10	16	25	12	7.5	8.0
MIN	3.0	2.8	3.0	3.3	2.1	2.5	6.4	9.3	6.3	3.3	2.3	2.1
AC-FT	263	186	260	257	171	217	509	685	642	376	203	215

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2002, BY WATER YEAR (WY)

	1995	1995	1995	1995	1995	1995	1995	2002	2002	2002	2002	2002
MEAN	5.93	4.53	3.67	3.29	3.26	5.27	14.2	73.8	78.0	20.6	15.7	6.89
MAX	12.3	8.09	6.42	4.92	5.79	8.46	24.5	112	228	49.7	50.8	13.3
(WY)	2000	2000	2000	2000	2000	2000	1998	1995	1995	1995	1999	1999
MIN	3.08	2.68	1.68	1.30	1.38	2.21	7.60	11.1	10.8	6.12	3.30	3.62
(WY)	1995	1995	1995	1995	1995	1995	1995	2002	2002	2002	2002	2002

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1995 - 2002

ANNUAL TOTAL	4479.4	2008.7		
ANNUAL MEAN	12.3	5.50		
HIGHEST ANNUAL MEAN			19.6	1995
LOWEST ANNUAL MEAN			35.6	2002
HIGHEST DAILY MEAN	78	May 18	5.50	2002
LOWEST DAILY MEAN	e2.6	Jan 1	415	May 31 1995
ANNUAL SEVEN-DAY MINIMUM	e2.8	Jan 1	e, a0.00	Aug 7 2000
MAXIMUM PEAK FLOW			2.3	Sep 2
MAXIMUM PEAK STAGE			34	Jun 4
ANNUAL RUNOFF (AC-FT)	8880	3980	4.31	Jun 4
10 PERCENT EXCEEDS	31	11		b759 Jun 2 1995
50 PERCENT EXCEEDS	5.6	4.0		5.87 Jun 2 1995
90 PERCENT EXCEEDS	3.0	2.9		

e Estimated.
b From rating curve extended above 300 ft³/s.
a Also occurred Aug 8-12, 2000.

06719505 CLEAR CREEK AT GOLDEN, CO

LOCATION.--Lat 39°45'11", long 105°14'05", in NE¹/₄NW¹/₄ sec.33, T.3 S., R.70 W., Jefferson County, Hydrologic Unit 10190004, on left bank 100 ft downstream from U.S. Highway 6 bridge at west edge of Golden, 0.7 mi downstream from headgate of Church ditch, and 13.3 mi downstream from North Clear Creek.

DRAINAGE AREA.--400 mi².

PERIOD OF RECORD.--October 1974 to current year. Records for station at site 0.8 mi upstream (October 1908 to December 1909, June 1911 to September 1974) are not equivalent due to diversions by Church ditch. Water-quality data available, November 1977 to August 1995. Sediment data available, April to September 1981, and April 1993 to August 1995.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,695 ft above sea level, from topographic map. Prior to Sept. 12, 1980, at site 80 ft downstream. Prior to Jan. 22, 1987, at datum 2.00 ft higher, at both sites.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by minor transmountain diversions from Colorado River basin through Berthoud Pass ditch (see elsewhere in this report) and several small reservoirs upstream from station. Diversion by Welch ditch 1.4 mi upstream from station and by Church Ditch 0.7 mi upstream from station for irrigation of about 5,200 acres downstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	119	85	e56	e54	e43	e30	48	91	238	148	52	39
2	112	80	e58	e53	e44	e32	50	90	220	134	54	38
3	104	81	e60	e51	e46	e33	45	84	242	137	53	35
4	101	78	e62	e51	e45	e34	57	84	267	142	76	34
5	102	79	e64	e51	e45	e34	59	87	222	129	76	38
6	112	76	e63	e52	e44	e35	63	92	206	115	123	37
7	103	77	e62	e52	e44	e36	64	106	213	115	108	32
8	107	84	e62	e52	e43	e37	62	120	210	109	92	32
9	101	74	e62	e52	e43	e37	62	108	214	102	72	40
10	105	62	e62	e51	e42	e38	67	104	216	96	62	68
11	101	69	e62	e51	e42	e38	76	103	212	108	59	66
12	98	82	e62	e50	e43	e39	67	129	198	75	55	72
13	99	70	e62	e50	e44	e39	68	113	181	76	60	71
14	110	74	e62	e49	e44	e39	77	127	173	74	58	61
15	112	65	e61	e48	e45	39	80	116	193	69	61	51
16	96	64	e60	e48	e46	40	77	126	193	66	60	48
17	90	64	e60	e47	e45	35	69	129	190	64	57	45
18	89	66	e59	e46	e45	38	69	135	180	64	57	44
19	87	66	e58	e47	e44	41	71	144	169	66	49	54
20	85	58	e57	e48	e43	42	71	160	198	63	56	49
21	88	59	e56	e47	e42	40	68	187	208	68	55	47
22	90	66	e56	e48	e42	42	60	160	200	71	50	46
23	91	65	e54	e49	45	46	62	156	182	73	47	44
24	85	52	e55	e50	44	44	60	197	177	77	46	41
25	74	49	e56	e49	39	40	65	167	169	70	43	42
26	80	60	e56	e48	32	40	69	185	152	72	39	50
27	81	47	e57	e48	28	40	77	172	168	68	41	56
28	84	e50	e56	e47	e28	41	71	165	166	66	40	55
29	91	e54	e55	e46	---	41	68	184	162	58	42	56
30	90	e55	e56	e45	---	44	79	200	140	58	48	56
31	88	---	e55	e44	---	46	---	244	---	54	46	---
TOTAL	2975	2011	1826	1524	1180	1200	1981	4265	5859	2687	1837	1447
MEAN	95.97	67.03	58.90	49.16	42.14	38.71	66.03	137.6	195.3	86.68	59.26	48.23
MAX	119	85	64	54	46	46	80	244	267	148	123	72
MIN	74	47	54	44	28	30	45	84	140	54	39	32
AC-FT	5900	3990	3620	3020	2340	2380	3930	8460	11620	5330	3640	2870

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2002, BY WATER YEAR (WY)

MEAN	87.09	63.98	51.28	45.24	43.48	44.58	75.56	319.2	762.5	455.6	211.8	126.4
MAX	192	115	89.6	74.3	67.3	64.2	126	655	1522	1203	535	231
(WY)	1985	1985	2000	2000	2000	2000	2000	1984	1995	1995	1999	1984
MIN	54.3	39.2	33.5	29.3	25.9	31.2	39.0	123	195	86.7	59.3	48.2
(WY)	1982	1982	1990	1995	1995	1976	1982	1981	2002	2002	2002	2002

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1975 - 2002
ANNUAL TOTAL	62494	28792	
ANNUAL MEAN	171.2	78.88	190.9
HIGHEST ANNUAL MEAN			321
LOWEST ANNUAL MEAN			78.9
HIGHEST DAILY MEAN	679	Jun 3	2300
LOWEST DAILY MEAN	e43	Feb 22	18
ANNUAL SEVEN-DAY MINIMUM	e45	Feb 22	24
MAXIMUM PEAK FLOW			2370
MAXIMUM PEAK STAGE		6.07	a6.44
ANNUAL RUNOFF (AC-FT)	124000	57110	138300
10 PERCENT EXCEEDS	482	163	534
50 PERCENT EXCEEDS	89	62	79
90 PERCENT EXCEEDS	53	40	38

e Estimated.

a Maximum gage height, 8.10 ft, Jun 21, 1995.

06720500 SOUTH PLATTE RIVER AT HENDERSON, CO

LOCATION.--Lat 39°55'19", long 104°52'04", in SE¹/₄NE¹/₄ sec.34, T.1 S., R.67 W., Adams County, Hydrologic Unit 10190003, on right bank 500 ft upstream from bridge on State Highway 22, and 0.2 mi northwest of Henderson.

DRAINAGE AREA.--4,713 mi².

PERIOD OF RECORD.--May 1926 to current year. Prior to October 1933, monthly discharge only, published in WSP 1310. Statistical summary computed for 1976 to current year. Water-quality data available, July 1955 to September 1957, June 1962 to September 1973, April 1988 to September 1995, March to June 2001, and August to September 2002.

REVISED RECORDS.--WSP 1310: 1934-36(M). WSP 1730: Drainage area. WDR C0-88-1: 1986.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 4999.12 ft above sea level. See WSP 1710 or 1730 for history of changes prior to June 1, 1960. June 1, 1960, to May 10, 1969, water-stage recorder at site 1,200 ft upstream at datum 5.00 ft higher. May 11 to Oct. 2, 1969, nonrecording gage at site 500 ft downstream at datum 3.00 ft higher. Oct. 3, 1969 to Jan. 15, 1986, at present site, at datum 3.00 ft higher.

REMARKS.--Records good except for period Oct. 1 to Mar. 10, which are fair, and estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, ground-water withdrawals, diversions for irrigation of about 253,000 acres, and return flow from irrigated areas. Water-quality data were collected as part of a water-quality assessment of drought conditions and are published in the "Drought Synoptic Sampling" section of this report.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	292	439	275	248	219	476	e119	212	235	194	131	152
2	278	462	276	254	218	493	e120	242	254	188	131	149
3	296	363	269	252	220	541	e108	238	268	199	125	155
4	299	349	265	244	218	618	e114	231	717	199	124	147
5	363	357	261	253	208	564	e120	218	271	182	142	139
6	374	317	267	253	192	360	e167	232	204	530	275	141
7	384	273	261	253	203	363	e181	224	174	308	156	142
8	395	433	262	248	203	387	e173	216	142	212	141	152
9	404	307	262	259	185	471	e159	208	188	201	137	166
10	419	339	269	273	193	494	e216	217	238	299	139	336
11	426	291	269	275	235	e433	e275	218	241	509	128	249
12	424	291	267	264	300	e342	e278	362	258	209	129	770
13	428	290	268	250	296	e347	e286	289	250	202	127	1070
14	445	281	265	239	293	e392	e286	247	232	185	127	429
15	481	270	258	236	314	e333	e297	240	220	180	125	227
16	444	284	267	245	352	e329	300	255	220	170	119	173
17	422	269	297	249	368	e322	269	389	263	171	113	167
18	402	276	279	257	374	e295	257	271	231	165	112	169
19	407	296	267	246	400	e277	254	246	212	150	120	541
20	404	284	269	245	378	e226	254	239	359	154	119	271
21	400	283	264	245	379	e190	241	239	270	131	121	223
22	416	290	252	246	378	e192	238	254	351	150	185	208
23	431	433	251	242	429	e194	213	225	248	139	175	213
24	432	351	256	247	427	e190	201	2160	217	127	157	201
25	420	312	233	244	457	e202	197	638	205	121	148	191
26	406	320	235	253	469	e185	205	285	199	141	144	220
27	406	313	249	235	467	e173	208	222	204	136	136	214
28	400	300	249	247	468	e165	215	208	190	133	197	210
29	421	264	247	242	---	e147	220	182	210	138	394	204
30	445	276	246	217	---	e155	205	178	204	136	479	210
31	439	---	255	221	---	e146	---	201	---	134	203	---
TOTAL	12403	9613	8110	7682	8843	10002	6376	9786	7475	6093	5059	7839
MEAN	400	320	262	248	316	323	213	316	249	197	163	261
MAX	481	462	297	275	469	618	300	2160	717	530	479	1070
MIN	278	264	233	217	185	146	108	178	142	121	112	139
AC-FT	24600	19070	16090	15240	17540	19840	12650	19410	14830	12090	10030	15550

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2002, BY WATER YEAR (WY)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	358	337	304	327	322	360	527	1093	1231	804	641	380															
MAX	1835	1268	554	592	642	842	1732	3923	4796	3204	2074	1141															
(WY)	1985	1985	1984	1984	1984	1983	1983	1980	1995	1995	1984	1984															
MIN	144	173	177	155	156	118	140	316	249	197	163	157															
(WY)	1978	1978	1976	1977	1977	1982	1982	2002	2002	2002	2002	1977															

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1976 - 2002

ANNUAL TOTAL	160138	99281	
ANNUAL MEAN	439	272	
HIGHEST ANNUAL MEAN			1379 1983
LOWEST ANNUAL MEAN			252 1981
HIGHEST DAILY MEAN	4530	May 5	2160 May 24 b6500 Jun 9 1995
LOWEST DAILY MEAN	209	Sep 13	e108 Apr 3 c27 Apr 7 1977
ANNUAL SEVEN-DAY MINIMUM	227	Sep 19	118 Aug 15 69 Mar 13 1982
MAXIMUM PEAK FLOW			4670 Sep 12 d12300 Jun 27 1983
MAXIMUM PEAK STAGE			7.42 Sep 12 f7.58 Jun 27 1983
ANNUAL RUNOFF (AC-FT)	317600	196900	404400
10 PERCENT EXCEEDS	715	426	1050
50 PERCENT EXCEEDS	351	248	340
90 PERCENT EXCEEDS	262	142	182

e Estimated.

a Average discharge for 48 years (water years 1927-74), 366 ft³/s; 265200 acre-ft/yr, prior to completion of Chatfield Dam.

b Maximum daily discharge for period of record, 13200 ft³/s, May 7, 1973.

c Minimum daily discharge for period of record, 4.4 ft³/s, Apr 1, 1950.

d Maximum discharge and stage for period of record, 33000 ft³/s, May 6, 1973, gage height, 11.67 ft, from rating curve extended above 7200 ft³/s, partly on basis of flow-over-road measurement of peak flow; maximum gage height, 12.93 ft, Jun 17, 1965, site and datum then in use.

f Maximum gage height for statistical period, 9.91 ft, May 17, 1995.

06720820 BIG DRY CREEK AT WESTMINSTER, CO

LOCATION.--Lat 39°54'20", long 105°02'04", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.6, T.2 S., R.68 W., Adams County, Hydrologic Unit 10190003, on left bank 0.75 mi upstream from bridge on 120th Ave., and 5.2 mi downstream from outlet of Standley Lake.

DRAINAGE AREA.--43.8 mi².

PERIOD OF RECORD.--July 1987 to September 1995, November 1996 to current year.

REVISED RECORDS.--WDR CO-91-1: Drainage area.

GAGE.--Water-stage recorder and concrete and steel v-notched control. Elevation of gage is 5,215 ft above sea level, from topographic map.

REMARKS.--Records fair except for November 15 to March 15, which are poor. Flow affected by storage diversions, ground-water withdrawals and diversions for irrigation and return flow from irrigated areas. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	1.6	1.8	1.7	2.1	1.2	1.5	1.5	6.2	5.9	7.0	0.65
2	2.3	1.4	3.2	1.5	2.4	1.4	1.2	2.2	1.8	11	7.0	0.61
3	2.3	1.4	2.8	1.5	2.1	1.8	1.3	1.7	1.2	11	7.6	0.58
4	3.0	1.4	3.6	2.3	2.0	3.5	0.96	1.3	14	11	10	0.54
5	7.8	1.4	2.9	1.9	1.7	4.5	0.91	1.3	8.1	9.2	10	0.45
6	5.5	1.4	2.4	1.8	1.5	4.0	0.88	1.2	5.3	8.8	3.9	0.28
7	4.4	1.5	2.2	1.8	1.4	2.7	0.91	9.7	1.8	6.0	7.0	0.50
8	3.5	9.6	1.9	1.8	1.4	2.3	0.84	8.9	1.4	3.1	6.8	0.51
9	5.1	3.0	2.0	1.8	1.5	2.8	0.87	1.5	1.4	2.8	3.1	0.94
10	6.0	2.2	2.4	4.1	1.5	2.2	0.76	2.2	0.97	2.2	5.5	22
11	5.3	1.8	2.2	3.3	1.4	1.3	0.60	8.7	0.69	5.0	5.3	2.7
12	4.1	1.2	2.1	2.3	1.5	2.4	4.3	23	0.98	3.7	7.9	6.6
13	4.0	1.5	1.8	1.9	1.6	1.4	7.5	11	1.1	3.2	7.7	19
14	3.7	1.6	1.8	1.6	1.9	4.6	10	8.8	1.4	1.5	7.6	6.6
15	8.4	1.8	1.7	1.6	1.6	2.2	2.7	8.9	1.1	1.4	7.9	1.9
16	3.7	1.7	2.4	1.6	1.3	1.6	1.7	16	0.96	1.2	8.1	1.1
17	3.0	1.5	2.4	1.3	1.4	1.5	1.3	13	0.75	0.64	9.9	1.0
18	1.7	1.9	2.0	1.2	1.2	1.1	1.2	3.2	0.72	0.61	10	1.2
19	1.7	2.7	2.1	1.5	1.0	2.0	0.99	2.6	0.85	0.57	10	1.5
20	1.8	1.9	1.8	1.2	0.81	1.5	1.0	12	2.1	0.62	9.4	1.1
21	1.9	1.7	1.7	0.83	0.95	0.99	1.2	12	1.2	0.64	1.3	0.82
22	2.1	1.6	1.7	1.0	0.99	1.6	1.2	12	1.7	0.70	0.75	0.71
23	1.7	2.2	1.6	1.2	1.1	2.5	1.0	12	3.8	3.7	0.68	0.58
24	1.5	2.0	1.4	2.1	1.1	2.6	1.00	141	23	8.8	1.1	1.52
25	1.7	1.8	1.4	2.7	1.2	2.2	1.1	20	13	3.4	0.77	0.70
26	2.3	e1.8	1.6	3.1	1.2	1.5	1.1	6.7	13	4.4	0.52	2.0
27	2.3	e1.8	1.8	3.0	0.83	1.7	1.1	3.5	13	13	0.18	1.4
28	3.0	e1.8	1.7	2.9	0.80	1.7	1.1	2.7	13	17	0.24	1.0
29	1.7	1.8	1.6	2.7	---	1.6	1.1	1.5	13	15	0.83	0.98
30	2.0	1.8	1.6	3.2	---	1.5	1.0	3.1	12	11	1.5	0.64
31	3.2	---	1.5	2.2	---	1.5	---	8.4	---	8.8	0.67	---
TOTAL	103.9	60.8	63.1	62.63	39.48	65.39	52.32	361.6	159.52	175.88	160.24	79.11
MEAN	3.352	2.027	2.035	2.020	1.410	2.109	1.744	11.66	5.317	5.674	5.169	2.637
MAX	8.4	9.6	3.6	4.1	2.4	4.6	10	141	23	17	10	22
MIN	1.5	1.2	1.4	0.83	0.80	0.99	0.60	1.2	0.69	0.57	0.18	0.28
AC-FT	206	121	125	124	78	130	104	717	316	349	318	157

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2002, BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	4.858	2.911	1.845	1.677	1.946	4.759	10.45	29.16	48.50	36.25	32.07	19.00				
MAX	12.0	4.80	3.71	3.16	3.85	16.2	34.8	66.4	82.4	79.8	49.6	47.9				
(WY)	2000	2001	1998	1994	1993	1992	1998	2000	1999	1995	1999	1999				
MIN	1.55	1.33	0.88	0.76	1.00	1.30	1.52	9.98	5.32	5.67	5.17	2.64				
(WY)	1989	1989	1999	1995	1988	1989	1989	1989	2002	2002	2002	2002				

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1987 - 2002

ANNUAL TOTAL	5870.29	1383.97		
ANNUAL MEAN	16.08	3.792	15.95	
HIGHEST ANNUAL MEAN			25.2	1999
LOWEST ANNUAL MEAN			3.79	2002
HIGHEST DAILY MEAN	232	May 5	232	May 5 2001
LOWEST DAILY MEAN	0.80	Jan 9	0.16	Jan 12 1995
ANNUAL SEVEN-DAY MINIMUM	1.4	Jan 5	0.37	Jan 6 1995
MAXIMUM PEAK FLOW			224	May 24
MAXIMUM PEAK STAGE			3.51	May 24
ANNUAL RUNOFF (AC-FT)	11640	2750	11560	
10 PERCENT EXCEEDS	40	9.3	48	
50 PERCENT EXCEEDS	3.4	1.8	3.3	
90 PERCENT EXCEEDS	1.6	0.83	1.1	

e Estimated.

a Maximum gage height, 6.08 ft, Aug 4, 1997.

06720990 BIG DRY CREEK AT MOUTH NEAR FORT LUPTON, CO

LOCATION.--Lat 40°04'09", long 104°49'52", in NE¹/₄SE¹/₄ sec.12, T.1 N., R.67 W., Weld County, Hydrologic Unit 10190003, on left bank 1.0 mi west of State Highway 85, 1.1 mi south of State Highway 52, and 25 mi northeast of Denver.

DRAINAGE AREA.--107 mi².

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,900 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation, and return flow from irrigated areas. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	29	22	27	e20	e22	18	35	38	5.7	13	30
2	39	15	22	e24	e20	e22	21	50	36	12	14	23
3	36	11	22	e24	22	e23	40	56	32	8.4	19	25
4	33	11	18	e24	23	e23	33	59	23	6.6	14	24
5	18	12	20	26	21	e28	34	55	30	20	17	19
6	15	12	21	26	e21	30	38	60	22	32	17	14
7	14	12	21	27	20	28	43	58	15	41	9.7	19
8	13	16	22	26	20	e27	34	47	12	36	13	14
9	13	19	24	25	21	e25	32	49	24	35	8.7	16
10	15	15	25	26	26	27	29	49	23	26	5.4	30
11	19	15	25	29	24	e26	32	38	24	53	5.8	28
12	20	16	24	27	e20	e24	20	57	28	41	6.3	26
13	18	13	24	27	21	24	12	39	27	40	12	30
14	19	10	24	26	20	24	17	23	43	34	4.5	35
15	17	10	25	25	e22	28	21	17	35	28	2.1	14
16	20	12	27	24	21	25	17	27	34	28	13	11
17	19	10	28	e24	22	25	13	42	35	24	3.8	15
18	22	7.0	28	e21	22	25	7.8	43	42	20	4.4	29
19	18	8.8	28	e21	21	24	19	33	35	21	5.0	37
20	15	13	28	e21	20	24	48	26	44	18	13	36
21	15	15	28	e20	20	23	49	17	37	14	10	33
22	16	17	29	e20	e20	e23	47	17	32	11	19	29
23	15	17	29	e23	20	e23	37	15	26	13	12	28
24	13	19	29	e24	20	25	22	86	15	8.8	12	39
25	12	19	29	e23	e21	24	17	140	23	4.1	11	35
26	15	21	28	24	e19	28	12	51	21	3.2	8.9	29
27	13	22	28	25	e19	37	16	39	20	2.2	6.9	31
28	20	23	28	25	21	33	37	36	18	10	5.5	31
29	28	22	28	24	---	35	38	41	14	14	18	32
30	24	23	27	23	---	19	31	38	6.8	13	8.0	33
31	24	---	27	23	---	14	---	32	---	16	12	---
TOTAL	629	464.8	788	754	587	788	834.8	1375	814.8	639.0	324.0	795
MEAN	20.3	15.5	25.4	24.3	21.0	25.4	27.8	44.4	27.2	20.6	10.5	26.5
MAX	51	29	29	29	26	37	49	140	44	53	19	39
MIN	12	7.0	18	20	19	14	7.8	15	6.8	2.2	2.1	11
AC-FT	1250	922	1560	1500	1160	1560	1660	2730	1620	1270	643	1580

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2002, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	
MEAN	38.2	28.3	23.4	25.0	23.2	31.1	54.0	57.4	53.4	49.3	42.9	44.8
MAX	64.3	39.1	35.2	46.0	34.6	50.1	79.1	93.8	117	111	75.1	67.0
(WY)	1995	2001	1998	2001	2001	1992	1999	2001	1995	1995	1997	1993
MIN	20.3	15.5	19.6	14.0	12.0	18.4	27.8	26.4	27.2	20.6	10.5	21.2
(WY)	2002	2002	1994	1995	1995	1993	2002	1993	2002	2002	2002	2000

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1992 - 2002

ANNUAL TOTAL	17104.8	8793.4	
ANNUAL MEAN	46.9	24.1	39.3
HIGHEST ANNUAL MEAN			53.2
LOWEST ANNUAL MEAN			24.1
HIGHEST DAILY MEAN	324	May 6	454
LOWEST DAILY MEAN	7.0	Nov 18	0.32
ANNUAL SEVEN-DAY MINIMUM	10	Nov 13	3.6
MAXIMUM PEAK FLOW			260
MAXIMUM PEAK STAGE			7.22
ANNUAL RUNOFF (AC-FT)	33930	17440	28480
10 PERCENT EXCEEDS	86	38	70
50 PERCENT EXCEEDS	31	23	29
90 PERCENT EXCEEDS	16	12	16

e Estimated.

06725450 ST. VRAIN CREEK BELOW LONGMONT, CO

LOCATION.--Lat 40°09'30", long 105°00'48", in NW¹/₄NW¹/₄ sec.9, T.2 N., R.68 W., Weld County, Hydrologic Unit 10190005, on right bank 1,750 ft upstream from mouth of Boulder Creek, 1.8 mi downstream from Spring Gulch, and 4.7 mi southeast of Longmont.

DRAINAGE AREA.--424 mi².

PERIOD OF RECORD.--October 1976 to September 1982, August 1984 to current year. Water-quality data available, October 1976 to February 1981.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,852 ft, above sea level, from topographic map. Prior to Aug. 15, 1984, at site 150 ft downstream at same datum. Aug. 15, 1984 to Oct. 1, 1997 at site 70 ft downstream at same datum. Oct. 2, 1997 to Apr. 18, 2000 at site 100 ft upstream at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation, and return flow from irrigated areas. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	51	49	40	37	39	36	35	48	67	61	60
2	56	49	48	40	37	38	37	38	63	66	62	60
3	56	48	47	41	36	39	38	42	72	68	68	57
4	54	46	47	40	36	45	36	47	101	67	66	55
5	62	47	45	40	34	43	35	47	83	64	66	54
6	64	47	44	39	35	42	33	49	77	76	e67	54
7	64	47	44	39	34	41	33	48	70	67	e68	52
8	63	51	43	39	33	40	35	48	70	76	67	51
9	65	48	43	39	30	40	38	49	68	70	61	58
10	61	47	44	43	32	40	38	48	67	66	57	81
11	59	47	44	40	32	40	38	52	68	86	53	69
12	59	47	44	39	33	40	37	70	72	83	53	68
13	59	47	43	39	35	41	36	54	76	80	60	65
14	57	48	44	39	35	47	34	45	86	72	59	60
15	57	49	43	40	37	44	34	45	95	72	58	56
16	60	49	44	39	37	42	37	49	100	69	56	55
17	56	49	44	39	37	41	40	56	101	69	54	54
18	53	50	44	39	37	42	37	49	102	70	50	50
19	51	50	43	39	38	43	38	49	104	68	50	54
20	55	50	43	38	38	42	40	47	82	63	52	52
21	57	50	43	37	e38	41	38	48	73	62	55	52
22	56	50	42	38	e37	40	37	45	75	65	56	53
23	56	49	41	38	e37	40	40	48	80	67	53	54
24	54	49	40	39	e36	39	39	119	84	76	52	55
25	54	49	40	37	e35	39	36	59	86	81	55	53
26	53	51	41	38	e37	40	38	47	80	78	54	59
27	53	49	44	37	e39	39	39	37	78	70	52	55
28	53	47	43	37	e41	40	39	35	71	73	58	52
29	53	49	43	36	---	40	39	36	66	72	61	53
30	55	49	42	36	---	38	38	36	66	70	58	51
31	52	---	41	37	---	37	---	43	---	67	54	---
TOTAL	1764	1459	1350	1201	1003	1262	1113	1520	2364	2200	1796	1702
MEAN	56.9	48.6	43.5	38.7	35.8	40.7	37.1	49.0	78.8	71.0	57.9	56.7
MAX	65	51	49	43	41	47	40	119	104	86	68	81
MIN	51	46	40	36	30	37	33	35	48	62	50	50
AC-FT	3500	2890	2680	2380	1990	2500	2210	3010	4690	4360	3560	3380

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2002, BY WATER YEAR (WY)

	MEAN	70.0	58.6	50.0	45.0	44.1	48.3	86.0	238	358	173	144	100
MAX	159	126	91.5	92.8	94.0	111	275	1155	1227	485	246	152	
(WY)	1985	1985	1985	1980	1980	1980	1998	1980	1995	1995	1999	1982	
MIN	45.5	34.5	30.8	25.7	27.9	28.9	27.5	35.8	63.3	71.0	57.9	53.7	
(WY)	1990	1979	1979	1978	1978	1982	1982	1977	1981	2002	2002	1977	

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1977 - 2002

ANNUAL TOTAL	28763	18734	
ANNUAL MEAN	78.8	51.3	118
HIGHEST ANNUAL MEAN			257
LOWEST ANNUAL MEAN			51.3
HIGHEST DAILY MEAN	233	Apr 11	2580
LOWEST DAILY MEAN	39	Feb 28	20
ANNUAL SEVEN-DAY MINIMUM	41	Feb 23	22
MAXIMUM PEAK FLOW			3600
MAXIMUM PEAK STAGE		3.99	6.87
ANNUAL RUNOFF (AC-FT)	57050	37160	85540
10 PERCENT EXCEEDS	144	70	201
50 PERCENT EXCEEDS	53	48	65
90 PERCENT EXCEEDS	42	37	35

e Estimated.

06730200 BOULDER CREEK AT NORTH 75TH STREET NEAR BOULDER, CO

LOCATION.--Lat 40°03'06", long 105°10'42", in SE¹/₄NW¹/₄ sec.13, T.1 N., R.70 W., Boulder County, Hydrologic Unit 10190005, on left bank, 50 ft upstream from bridge on North 75th Street, 0.2 mi downstream from Boulder feeder ditch, and 6 mi northeast of Boulder.

DRAINAGE AREA.--304 mi².

PERIOD OF RECORD.--October 1986 to current year.

GAGE.--Water-stage recorder with satellite telemetry, and concrete control. Elevation of gage is 5,106 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. Flow is partially regulated by Barker Reservoir, and affected by Boulder feeder ditch, Boulder sewage treatment plant, and Public Service power plant. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	37	47	29	28	30	40	56	141	51	102	44
2	48	37	48	31	27	29	34	63	132	69	122	51
3	47	36	54	35	27	29	32	57	151	109	131	59
4	46	35	48	31	29	32	34	56	177	111	132	52
5	53	39	45	30	27	32	38	58	69	139	159	61
6	61	36	44	29	28	31	42	60	130	135	155	61
7	57	32	48	30	26	30	30	62	131	134	156	62
8	44	44	42	31	26	28	35	77	123	132	125	67
9	42	39	42	31	24	28	38	116	118	116	134	61
10	40	36	50	36	25	30	40	136	107	106	146	106
11	42	36	47	32	27	30	31	136	107	100	112	76
12	49	37	49	28	28	29	49	157	109	95	114	70
13	43	37	52	27	27	30	32	145	101	97	135	70
14	43	32	50	27	27	41	36	145	81	102	128	62
15	45	33	57	30	28	41	73	139	84	99	115	56
16	46	32	57	29	26	37	72	119	85	102	83	59
17	44	31	57	27	25	34	60	109	67	120	76	73
18	42	32	54	28	27	36	70	98	55	124	78	85
19	41	35	49	26	28	40	70	82	53	133	72	83
20	41	36	47	26	28	35	76	76	62	126	70	78
21	41	47	44	28	28	33	76	84	58	126	71	74
22	45	39	42	26	28	33	72	93	55	131	58	59
23	40	40	38	28	27	32	76	102	51	148	58	54
24	39	39	34	28	27	32	61	208	51	154	55	57
25	40	38	31	28	30	32	53	84	50	151	57	59
26	36	46	34	26	30	33	51	80	53	152	52	64
27	38	44	36	27	31	39	50	77	51	145	53	66
28	40	40	36	27	31	36	49	71	44	122	56	66
29	41	41	36	27	---	33	52	72	42	112	55	69
30	39	50	33	27	---	33	52	85	43	110	57	68
31	41	---	33	27	---	33	---	112	---	104	51	---
TOTAL	1362	1136	1384	892	770	1021	1524	3015	2581	3655	2968	1972
MEAN	43.9	37.9	44.6	28.8	27.5	32.9	50.8	97.3	86.0	118	95.7	65.7
MAX	61	50	57	36	31	41	76	208	177	154	159	106
MIN	36	31	31	26	24	28	30	56	42	51	51	44
AC-FT	2700	2250	2750	1770	1530	2030	3020	5980	5120	7250	5890	3910

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2002, BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	48.9	54.8	51.1	47.1	45.4	50.2	85.5	185	286	209	143	76.1				
MAX	77.8	81.7	74.9	68.3	61.3	90.6	236	465	868	492	235	111				
(WY)	1997	1998	1989	1987	1996	1998	1998	1995	1995	1995	1999	1995				
MIN	31.5	37.7	36.1	28.8	27.5	31.2	37.4	97.3	86.0	118	95.5	50.8				
(WY)	1987	1993	1988	2002	2002	1989	1989	2002	2002	2002	1991	1992				

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1987 - 2002
ANNUAL TOTAL	31396	22280	
ANNUAL MEAN	86.0	61.0	107
HIGHEST ANNUAL MEAN			198
LOWEST ANNUAL MEAN			61.0
HIGHEST DAILY MEAN	297	Aug 9	1450
LOWEST DAILY MEAN	24	Feb 18	20
ANNUAL SEVEN-DAY MINIMUM	25	Feb 13	23
MAXIMUM PEAK FLOW			1950
MAXIMUM PEAK STAGE			7.85
ANNUAL RUNOFF (AC-FT)	62270	44190	77610
10 PERCENT EXCEEDS	190	124	216
50 PERCENT EXCEEDS	48	48	62
90 PERCENT EXCEEDS	31	28	35

06730400 COAL CREEK NEAR LOUISVILLE, CO

LOCATION.--Lat 39°58'34", long 105°07'00", in NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.9, T.1 S., R.69 W., Boulder County, Hydrologic Unit 10190005, on left bank on upstream side of County road 62 bridge, and 1.1 mi northeast of Louisville.

DRAINAGE AREA.--27.3 mi².

PERIOD OF RECORD.--July 1997 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,280 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by diversions for irrigation, and return flow from irrigated areas. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	2.8	1.9	1.4	1.2	1.0	1.1	1.1	1.7	0.20	0.01	0.74
2	2.6	2.9	1.9	1.3	1.1	e1.0	0.93	1.1	1.7	0.26	0.18	0.71
3	2.5	2.8	1.9	1.4	1.2	e1.1	0.95	1.1	1.6	0.60	0.08	0.84
4	2.3	2.8	1.8	1.4	1.2	e1.3	1.0	1.2	3.2	0.68	0.48	0.89
5	3.4	3.1	1.6	1.3	1.2	e1.4	1.1	1.2	1.7	0.43	0.87	0.87
6	2.6	3.3	1.8	1.3	1.2	1.9	1.1	1.2	2.0	0.73	0.12	0.89
7	2.7	2.9	1.7	1.5	1.1	1.9	1.2	1.3	1.8	0.62	0.01	1.0
8	2.9	4.9	1.7	1.6	1.1	1.4	1.2	1.1	1.6	0.63	0.03	1.1
9	3.0	3.0	1.6	1.7	0.84	1.4	1.2	1.1	1.6	0.55	e0.02	1.4
10	2.5	2.6	1.7	2.3	1.1	1.5	1.2	0.94	1.4	1.3	e0.01	7.9
11	2.4	2.6	1.7	2.0	1.1	1.8	1.2	1.1	1.4	1.0	e0.01	1.3
12	2.5	2.6	1.8	1.8	1.1	1.8	0.85	3.0	1.3	0.57	e0.01	3.0
13	2.5	2.7	1.7	1.8	1.1	1.7	1.1	0.99	1.1	0.52	e0.01	2.0
14	2.4	2.7	1.6	1.6	1.1	1.8	1.1	0.92	0.99	0.48	0.17	1.2
15	2.3	2.6	1.6	1.4	1.2	1.3	1.0	0.97	0.91	0.40	0.16	1.2
16	2.5	2.6	1.6	1.4	1.1	1.3	0.94	2.0	0.92	0.51	0.08	1.2
17	2.8	2.6	1.7	1.4	1.2	1.3	1.0	2.0	0.81	0.44	0.07	1.1
18	2.6	2.4	1.7	1.4	1.3	1.3	1.0	1.4	0.75	0.50	0.05	1.1
19	2.7	2.5	1.6	1.4	1.3	1.3	0.85	1.5	0.79	1.7	0.07	1.1
20	2.5	2.4	1.6	1.3	1.3	1.3	0.81	1.3	2.0	2.0	4.0	1.2
21	2.4	2.3	1.6	1.5	1.3	1.0	0.91	1.3	0.89	1.1	0.05	1.4
22	2.5	2.3	1.7	1.7	1.3	1.2	1.0	1.1	0.83	0.98	0.01	1.5
23	2.5	2.3	1.7	1.8	1.4	1.3	1.2	2.8	0.54	1.5	0.01	1.4
24	2.4	2.2	1.7	1.6	1.3	1.0	1.2	16	0.36	1.5	0.04	1.5
25	2.4	2.1	1.7	1.7	1.3	0.95	0.99	3.3	0.17	0.99	0.12	1.5
26	2.4	2.7	1.8	1.7	1.2	1.1	1.1	2.3	0.17	0.54	0.20	1.7
27	2.5	2.4	1.8	1.5	1.0	1.1	1.2	1.9	0.39	0.16	0.43	1.5
28	2.5	2.2	1.8	1.6	1.2	1.2	1.3	1.8	0.25	0.13	0.56	1.6
29	2.4	2.1	1.8	1.5	---	1.1	1.3	1.9	0.27	0.17	0.72	1.8
30	2.4	2.0	1.6	1.3	---	1.0	1.4	2.1	0.10	0.05	0.72	1.8
31	2.5	---	1.4	1.2	---	1.1	---	2.0	---	0.01	0.71	---
TOTAL	79.3	79.4	52.8	47.8	33.04	40.85	32.43	63.02	33.24	21.25	10.01	46.44
MEAN	2.56	2.65	1.70	1.54	1.18	1.32	1.08	2.03	1.11	0.69	0.32	1.55
MAX	3.4	4.9	1.9	2.3	1.4	1.9	1.4	16	3.2	2.0	4.0	7.9
MIN	2.3	2.0	1.4	1.2	0.84	0.95	0.81	0.92	0.10	0.01	0.01	0.71
AC-FT	157	157	105	95	66	81	64	125	66	42	20	92

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2002, BY WATER YEAR (WY)

	1997	1998	1999	2000	2001	2002
MEAN	2.86	2.52	2.22	1.79	1.71	2.77
MAX	3.85	3.42	3.23	2.45	2.44	6.17
(WY)	1998	2000	2000	2000	2000	1998
MIN	2.01	1.53	1.46	0.99	1.05	1.28
(WY)	1999	2001	2001	2001	2001	2001

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1997 - 2002

ANNUAL TOTAL	1135.03	539.58	
ANNUAL MEAN	3.11	1.48	4.86
HIGHEST ANNUAL MEAN			8.48
LOWEST ANNUAL MEAN			1.48
HIGHEST DAILY MEAN		16	277
LOWEST DAILY MEAN	0.42	0.01	a0.01
ANNUAL SEVEN-DAY MINIMUM	0.51	0.01	0.01
MAXIMUM PEAK FLOW		63	b643
MAXIMUM PEAK STAGE		1.94	3.42
ANNUAL RUNOFF (AC-FT)	2250	1070	3520
10 PERCENT EXCEEDS	7.1	2.5	10
50 PERCENT EXCEEDS	2.4	1.3	2.3
90 PERCENT EXCEEDS	0.99	0.38	1.0

e Estimated.

a Also occurred Aug 1, 7, 10-13, 22-23, 2002.

b From rating curve extended above 150 ft³/s.

06730500 BOULDER CREEK AT MOUTH NEAR LONGMONT, CO

LOCATION.--Lat 40°09'08", long 105°00'52", in NW 1/4 SW 1/4 sec.9, T.2 N., R.68 W., Weld County, Hydrologic Unit 10190005, on left bank 0.6 mi upstream from mouth, 1.0 mi downstream from State Highway 254, and 4.8 mi southeast of Longmont.

DRAINAGE AREA.--439 mi².

PERIOD OF RECORD.--March 1927 to September 1949, May 1951 to September 1955, October 1978 to September 1990, October 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,860 ft above sea level, from topographic map. Prior to June 10, 1939, at site 0.8 mi upstream at different datum. June 10, 1939 to Sept. 30, 1949, at site 1.0 mi upstream, at different datum. May 1, 1951 to Sept. 30, 1955, at site 1.4 mi upstream, at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain, transbasin, and storage diversions, diversions for irrigation, water-treatment plants, and return flows from irrigated areas. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e9.5	e16	e60	50	49	48	35	1.1	2.8	1.2	2.3	3.8
2	e9.3	e15	e63	52	44	54	33	1.2	5.0	1.4	2.3	3.7
3	e11	e15	e66	73	44	52	28	1.4	3.1	1.5	2.3	3.8
4	e14	e15	66	57	46	51	25	1.2	37	1.6	2.3	3.8
5	e17	e14	62	52	43	51	22	1.2	2.6	1.4	2.4	3.9
6	e20	e15	59	52	42	52	14	1.2	3.6	1.4	2.6	4.6
7	e18	e16	61	53	41	50	11	1.3	2.4	1.4	2.1	4.9
8	e15	e20	56	52	42	48	6.3	1.4	2.4	1.4	2.2	5.0
9	e14	e19	55	53	40	48	5.4	1.1	2.4	1.4	2.4	5.2
10	e13	e18	60	56	48	49	4.7	1.1	2.5	1.5	2.4	5.8
11	e15	e18	58	57	41	49	4.1	1.1	2.6	1.5	2.5	4.0
12	e17	e18	58	55	41	48	3.4	2.2	2.4	1.5	2.7	4.3
13	e16	e17	59	54	40	48	2.7	2.3	2.3	1.4	2.5	4.7
14	e15	e16	59	54	41	53	2.5	1.6	2.6	1.5	2.4	4.8
15	e16	e18	60	53	41	59	2.5	1.1	2.2	1.4	2.5	5.2
16	e17	e17	62	55	41	56	2.2	1.2	2.0	1.7	2.7	5.2
17	e16	e16	64	54	40	55	2.0	1.3	1.9	1.6	2.4	5.4
18	e15	e18	62	59	41	54	1.8	1.2	1.6	1.5	2.4	5.5
19	e14	e20	58	58	42	56	1.7	1.5	1.7	1.6	2.4	5.2
20	e13	e28	57	56	43	55	1.6	1.4	2.1	1.7	2.6	5.1
21	e14	e33	55	51	42	53	1.5	1.4	2.5	2.0	2.8	5.0
22	e15	e31	54	50	41	53	1.5	1.4	2.2	2.0	2.9	5.1
23	e16	e30	52	51	41	53	1.4	1.5	2.4	2.1	2.8	5.1
24	e15	e30	53	54	41	49	1.3	106	2.5	2.1	2.8	5.2
25	e16	e37	51	53	43	50	1.3	46	2.6	2.1	2.9	5.5
26	e14	e40	50	48	45	52	1.4	7.9	2.2	2.1	3.0	5.7
27	e15	e39	52	47	46	50	1.2	3.1	2.0	2.0	3.2	5.7
28	e16	e41	54	48	47	51	1.1	2.9	2.0	2.0	3.4	5.5
29	e15	e46	53	47	---	42	1.0	3.2	1.9	2.0	3.5	5.4
30	e16	e45	51	47	---	39	1.0	2.8	1.5	2.0	3.6	5.1
31	e17	---	50	45	---	36	---	2.5	---	2.2	3.7	---
TOTAL	463.8	721	1780	1646	1196	1564	221.6	205.8	107.0	52.2	83.0	147.2
MEAN	15.0	24.0	57.4	53.1	42.7	50.5	7.39	6.64	3.57	1.68	2.68	4.91
MAX	20	46	66	73	49	59	35	106	37	2.2	3.7	5.8
MIN	9.3	14	50	45	40	36	1.0	1.1	1.5	1.2	2.1	3.7
AC-FT	920	1430	3530	3260	2370	3100	440	408	212	104	165	292

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2002, BY WATER YEAR (WY)

	34.8	44.3	49.6	51.3	50.5	52.3	93.9	171	187	44.4	23.5	23.8
MEAN	34.8	44.3	49.6	51.3	50.5	52.3	93.9	171	187	44.4	23.5	23.8
MAX	127	109	93.8	104	120	148	581	1101	976	367	164	440
(WY)	1985	1998	1939	1980	1980	1983	1942	1942	1947	1983	1999	1938
MIN	0.70	0.48	1.16	2.94	2.75	2.58	1.15	1.06	1.22	1.09	0.55	0.54
(WY)	1955	1955	1940	1935	1935	1935	1954	1955	1954	1954	1954	1954

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1927 - 2002

ANNUAL TOTAL	14614.1	8187.6	
ANNUAL MEAN	40.0	22.4	69.1
HIGHEST ANNUAL MEAN			220
LOWEST ANNUAL MEAN			3.93
HIGHEST DAILY MEAN	266	May 5	2300
LOWEST DAILY MEAN	5.0	Aug 13	a0.00
ANNUAL SEVEN-DAY MINIMUM	6.9	Aug 13	0.00
MAXIMUM PEAK FLOW			238
MAXIMUM PEAK STAGE			2.60
ANNUAL RUNOFF (AC-FT)	28990	16240	50050
10 PERCENT EXCEEDS	63	54	125
50 PERCENT EXCEEDS	44	14	36
90 PERCENT EXCEEDS	10	1.5	2.0

e Estimated.

a No flow at times many years.

b Site and datum then in use, from rating curve extended above 340 ft³/s, on basis of slope-area measurement of peak flow.

402114105350101 BIG THOMPSON RIVER BELOW MORAINES PARK NEAR ESTES PARK, CO

LOCATION.--Lat 40°21'14", long 105°35'01", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.33, T.5 N., R.73 W., Larimer County, Hydrologic Unit 10190006, on left upstream wingwall of bridge at lower Moraine Park parking lot, in Rocky Mountain National Park, and 4.0 mi southwest of Estes Park.

DRAINAGE AREA.--39.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1995 to September 1997, April 2001 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,005 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. No diversion or regulation upstream from gage.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	9.5	e5.6	e2.5	e2.5	e2.3	e3.7	18	161	51	19	12
2	14	9.2	e5.6	e2.4	e2.4	e2.1	3.7	17	161	49	19	10
3	14	9.2	e5.5	e2.4	e2.4	e2.0	3.7	15	147	47	22	10
4	13	8.5	e5.4	e2.3	e2.3	e2.1	3.9	16	141	47	22	8.8
5	13	9.5	e5.4	e2.3	e2.3	e2.1	4.4	16	117	53	22	7.8
6	13	9.3	e5.3	e2.3	e2.2	e2.1	5.8	21	122	61	35	8.0
7	12	9.8	e5.2	e3.2	e2.2	e2.1	7.2	33	128	51	30	8.3
8	12	11	e5.1	e3.3	e2.2	e2.1	6.1	43	130	50	42	9.5
9	13	6.9	e5.1	e3.2	e2.1	e2.1	6.3	29	133	49	36	13
10	13	8.9	e5.0	e2.7	e2.1	e2.1	7.5	24	127	49	26	13
11	12	9.2	e5.0	e2.4	e2.8	e2.2	7.7	22	109	50	22	14
12	12	9.8	e4.9	e2.4	e2.5	e2.1	6.8	25	95	44	20	26
13	12	8.9	e4.7	e2.4	e2.3	e2.2	7.4	22	90	38	19	25
14	12	8.4	e4.6	e2.3	e2.3	e2.1	10	31	89	35	17	19
15	12	7.7	e4.6	e2.3	e2.2	e2.1	12	34	86	33	15	16
16	12	8.0	e4.5	e2.3	e2.3	e2.1	13	41	79	31	15	14
17	12	7.8	e4.3	e2.3	e2.8	e2.1	11	33	78	30	14	13
18	12	8.2	e4.0	e2.3	e2.8	e2.1	10	51	77	28	13	14
19	11	8.0	e3.9	e2.2	e2.7	e2.1	9.8	67	72	27	13	14
20	11	9.2	e3.9	e2.3	e2.7	e2.1	8.4	96	80	27	13	13
21	11	10	e3.9	e2.3	e2.8	e2.5	10	113	80	43	13	12
22	11	9.6	e3.7	e2.3	e2.8	e2.6	8.5	85	79	36	16	11
23	11	7.6	e3.6	e2.3	e3.0	e2.6	7.4	54	75	34	14	10
24	8.9	e8.0	e3.0	e2.3	e3.0	e2.4	7.4	51	69	32	14	10
25	9.8	e7.7	e3.0	e2.7	e2.5	e2.5	8.8	47	65	29	14	9.7
26	10	e6.4	e2.8	e2.8	e2.2	e2.5	9.6	52	62	37	13	11
27	9.9	e6.0	e2.7	e3.6	e2.2	e2.4	11	59	59	29	13	11
28	10	e5.8	e2.6	e3.2	e2.2	e2.4	9.9	72	56	25	13	11
29	11	e5.7	e2.6	e2.9	---	e2.5	8.8	102	53	22	13	11
30	11	e5.6	e2.6	e2.8	---	e2.6	12	164	53	20	14	12
31	11	---	e2.5	e2.5	---	e2.7	---	197	---	19	12	---
TOTAL	364.6	249.4	130.6	79.5	68.8	70.0	241.8	1650	2873	1176	583	377.1
MEAN	11.76	8.313	4.213	2.565	2.457	2.258	8.060	53.23	95.77	37.94	18.81	12.57
MAX	15	11	5.6	3.6	3.0	2.7	13	197	161	61	42	26
MIN	8.9	5.6	2.5	2.2	2.1	2.0	3.7	15	53	19	12	7.8
AC-FT	723	495	259	158	136	139	480	3270	5700	2330	1160	748

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2002, BY WATER YEAR (WY)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
MEAN	15.85	10.01	5.897	3.767	3.596	4.325	13.59	118.1	234.3	90.22	56.72	30.79
MAX	20.9	12.1	6.82	4.68	4.36	6.51	17.5	145	399	133	111	61.8
(WY)	1997	1997	1997	1997	1996	1997	1997	1997	1997	1997	1997	1997
MIN	11.8	8.31	4.21	2.56	2.46	2.26	8.06	53.2	95.8	37.9	18.8	12.6
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002

SUMMARY STATISTICS

FOR 2002 WATER YEAR

WATER YEARS 1996 - 2002

ANNUAL TOTAL	7863.8	
ANNUAL MEAN	21.54	52.00
HIGHEST ANNUAL MEAN		77.0
LOWEST ANNUAL MEAN		21.5
HIGHEST DAILY MEAN	197	May 31
LOWEST DAILY MEAN	e2.0	Mar 3
ANNUAL SEVEN-DAY MINIMUM	e2.1	Mar 2
MAXIMUM PEAK FLOW	291	May 31
MAXIMUM PEAK STAGE	5.60	May 31
ANNUAL RUNOFF (AC-FT)	15600	37670
10 PERCENT EXCEEDS	59	152
50 PERCENT EXCEEDS	10	12
90 PERCENT EXCEEDS	2.3	3.6

e Estimated.

402114105350101 BIG THOMPSON RIVER BELOW MORAINES PARK NEAR ESTES PARK, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1995 to September 1998, February 2001 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May to September 2002.
WATER TEMPERATURE: May to September 2002.

INSTRUMENTATION.--Water-quality monitor from May to September 2002.

REMARKS.--Daily specific conductance record is excellent. Daily water temperature record is excellent. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR CURRENT YEAR.--(during period May to September)

SPECIFIC CONDUCTANCE: Maximum, 26 microsiemens/cm, Sept. 27; minimum, 13 microsiemens/cm, on several days.
WATER TEMPERATURE: Maximum, 21.7°C, July 30; minimum, 0.0°C, May 24.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	
OCT														
03...	1245	14	20	7.4	10.5	10.7	9	7	--	--	--	--	2.1	
NOV														
08...	1040	10	24	7.2	4.1	10.7	10	8	--	--	--	--	2.5	
DEC														
03...	1115	5.6	26	6.6	.6	10.5	11	9	--	--	--	--	2.7	
JAN														
08...	1040	3.3	30	6.9	.2	9.6	13	10	--	--	--	--	3.1	
FEB														
06...	1125	2.2	31	6.8	.3	8.9	20	17	--	--	--	--	2.8	
MAR														
07...	1100	2.1	33	6.9	.1	10.2	11	9	--	--	--	--	2.9	
APR														
01...	1040	3.7	27	7.4	4.3	11.4	12	10	--	--	--	--	2.5	
MAY														
07...	1100	41	20	7.1	8.2	9.5	6	5	--	--	--	--	2.1	
JUN														
05...	1050	107	18	6.8	5.9	10.2	4	4	--	--	--	--	1.5	
JUL														
11...	1020	52	14	7.2	15.0	8.2	1	1	--	--	--	--	1.2	
AUG														
07...	1040	29	17	7.2	15.3	9.5	7	6	1.48	.361	3.06	.82	1.4	
SEP														
04...	1030	10	19	7.4	13.0	8.7	8	7	1.71	.448	3.84	1.04	1.9	
Date		CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, INOR-GANIC, TOTAL (MG/L AS C) (00688)
OCT														
03...	E.20	--	--	<.002	.126	<.015	E.09	.20	E.004	<.004	<.007	1.7	<.1	
NOV														
08...	E.26	--	--	<.002	.147	<.015	.11	E.09	.004	<.004	<.007	1.6	--	
DEC														
03...	.62	--	--	<.002	.148	<.015	E.10	E.06	.004	E.003	<.007	1.3	--	
JAN														
08...	.37	--	--	<.002	.106	<.015	.12	.12	.005	<.004	<.007	1.6	--	
FEB														
06...	E.21	--	--	<.002	.114	<.015	E.07	E.05	E.003	<.004	<.007	1.2	--	
MAR														
07...	.36	--	--	<.002	.121	<.015	.11	E.09	.005	E.003	<.007	1.7	<.1	
APR														
01...	E.30	--	--	<.002	.111	E.014	.15	E.08	.011	.005	<.007	1.8	<.1	
MAY														
07...	E.24	--	--	<.002	.087	<.015	.17	.17	.010	.005	<.007	4.5	<.1	
JUN														
05...	<.30	--	--	<.002	.132	<.015	.18	.15	.009	.005	<.007	4.3	<.1	
JUL														
11...	<.30	--	--	<.002	.117	<.015	.13	E.09	.007	E.003	<.007	1.7	<.1	
AUG														
07...	<.30	68	E2.9	<.002	.190	<.015	.10	.10	.007	<.004	<.007	1.5	<.1	
SEP														
04...	.33	111	4.0	<.002	.133	<.015	E.10	E.06	.006	E.002	<.007	1.5	<.1	

E Estimated laboratory analysis value.

PLATTE RIVER BASIN

402114105350101 BIG THOMPSON RIVER BELOW MORAINES PARK NEAR ESTES PARK, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	CARBON, ORGANIC- PARTIC- ULATE TOTAL (MG/L AS C) (00689)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	NITRO- GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	METHYL AZIN- PHOS WAT FLT GF, REC (UG/L) (82686)	BEN- FLUR- ALIN WAT FLD GF, REC (UG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)
OCT 03...	.3	.3	.04	--	--	--	--	--	--	--	--	--	--
NOV 08...	--	.2	.02	--	--	--	--	--	--	--	--	--	--
DEC 03...	--	.3	<.02	--	--	--	--	--	--	--	--	--	--
JAN 08...	--	.2	.03	--	--	--	--	--	--	--	--	--	--
FEB 06...	--	.2	.02	<.006	<.004	<.006	<.007	<.050	<.010	<.002	<.041	<.020	<.005
MAR 07...	.2	.2	.02	<.006	<.004	<.006	<.007	<.050	<.010	<.002	<.041	<.020	<.005
APR 01...	.5	.5	.04	<.006	<.004	<.006	<.007	<.050	<.010	<.002	<.041	<.020	<.005
MAY 07...	.4	.4	.03	<.006	<.004	<.006	<.007	<.050	<.010	<.002	<.041	<.020	<.005
JUN 05...	.3	.3	.03	<.006	<.004	<.006	<.007	<.050	<.010	<.002	<.041	<.020	<.005
JUL 11...	.3	.3	.03	<.006	<.004	<.006	<.007	<.050	<.010	<.002	<.041	<.020	<.005
AUG 07...	.3	.3	<.02	<.006	<.004	<.006	<.007	<.050	<.010	<.002	<.041	<.020	<.005
SEP 04...	.2	.2	<.02	<.006	<.004	E.002	<.007	<.050	<.010	<.002	<.041	<.020	<.005
Date	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	P, P' DDE DISSOLV (UG/L) (34653)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	LINDANE DIS- SOLVED (UG/L) (39341)
OCT 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 06...	<.018	<.003	<.003	<.005	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004
MAR 07...	<.018	<.003	<.003	<.005	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004
APR 01...	<.018	<.003	<.003	<.005	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004
MAY 07...	<.018	<.003	<.003	<.005	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004
JUN 05...	<.018	<.003	<.003	<.005	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004
JUL 11...	<.018	<.003	<.003	<.005	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004
AUG 07...	<.018	<.003	<.003	<.005	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004
SEP 04...	<.018	<.003	<.003	<.005	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004

E Estimated laboratory analysis value.

402114105350101 BIG THOMPSON RIVER BELOW MORAINA PARK NEAR ESTES PARK, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)
OCT 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 06...	<.035	<.027	<.006	<.013	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	<.01
MAR 07...	<.035	<.027	<.006	<.013	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	<.01
APR 01...	<.035	<.027	<.006	<.013	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	<.01
MAY 07...	<.035	<.027	<.006	<.013	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	<.01
JUN 05...	<.035	<.027	<.006	<.013	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	<.01
JUL 11...	<.035	<.027	<.006	<.013	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	<.01
AUG 07...	<.035	<.027	<.006	<.013	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	<.01
SEP 04...	<.035	<.027	<.006	<.013	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	<.01

Date	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
OCT 03...	--	--	--	--	--	--	--	--	--	--	--
NOV 08...	--	--	--	--	--	--	--	--	--	--	--
DEC 03...	--	--	--	--	--	--	--	--	--	--	--
JAN 08...	--	--	--	--	--	--	--	--	--	--	--
FEB 06...	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009
MAR 07...	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009
APR 01...	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009
MAY 07...	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009
JUN 05...	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009
JUL 11...	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009
AUG 07...	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009
SEP 04...	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009

PLATTE RIVER BASIN

402114105350101 BIG THOMPSON RIVER BELOW MORAINES PARK NEAR ESTES PARK, CO--Continued
(National Water-Quality Assessment Program station)

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	21	20	21
16	---	---	---	---	---	---	---	---	---	22	20	21
17	---	---	---	---	---	---	---	---	---	22	21	22
18	---	---	---	---	---	---	---	---	---	23	21	22
19	---	---	---	---	---	---	---	---	---	25	23	24
20	---	---	---	---	---	---	---	---	---	25	21	23
21	---	---	---	---	---	---	---	---	---	23	21	22
22	---	---	---	---	---	---	---	---	---	21	20	20
23	---	---	---	---	---	---	---	---	---	21	21	21
24	---	---	---	---	---	---	---	---	---	24	21	22
25	---	---	---	---	---	---	---	---	---	25	23	23
26	---	---	---	---	---	---	---	---	---	23	21	22
27	---	---	---	---	---	---	---	---	---	23	20	21
28	---	---	---	---	---	---	---	---	---	21	20	20
29	---	---	---	---	---	---	---	---	---	20	19	19
30	---	---	---	---	---	---	---	---	---	21	19	20
31	---	---	---	---	---	---	---	---	---	19	16	17
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	17	16	17	15	14	14	19	18	18	21	19	20
2	17	15	16	15	14	14	19	18	18	21	19	20
3	16	15	16	15	14	15	19	18	18	23	19	21
4	16	15	16	14	14	14	19	18	18	21	19	20
5	16	16	16	14	13	14	19	17	19	22	19	21
6	16	15	16	14	13	13	18	17	17	22	20	21
7	16	15	16	14	13	14	18	17	17	22	20	21
8	17	16	16	14	13	14	18	17	18	22	20	21
9	17	16	17	14	13	13	19	18	18	22	20	21
10	18	17	17	14	13	13	20	19	19	22	20	21
11	18	17	17	15	13	13	21	20	20	22	19	21
12	18	17	17	15	14	14	21	20	21	21	20	21
13	17	16	17	16	14	15	22	21	21	21	20	21
14	17	16	17	17	15	16	22	21	22	22	21	21
15	17	16	16	17	15	16	23	22	22	22	20	21
16	16	15	16	17	16	16	24	21	23	22	20	21
17	16	15	15	18	16	17	24	21	22	22	20	21
18	16	15	16	18	16	17	23	21	22	22	21	22
19	16	15	16	18	16	17	23	21	22	22	21	22
20	16	16	16	18	16	17	24	19	22	24	21	22
21	16	15	16	19	17	17	23	19	21	22	21	22
22	16	15	15	17	16	17	22	18	19	23	21	22
23	15	14	14	17	16	16	20	18	19	24	22	23
24	14	14	14	17	16	17	20	18	19	23	21	22
25	14	14	14	18	16	17	21	18	19	24	21	22
26	14	14	14	18	17	17	21	19	20	23	21	22
27	14	14	14	18	17	17	21	19	20	26	21	23
28	15	14	14	19	17	17	21	18	20	23	21	22
29	14	14	14	19	17	17	21	18	20	23	21	22
30	15	13	14	19	18	18	21	18	19	23	21	22
31	---	---	---	19	18	18	21	18	20	---	---	---
MONTH	18	13	16	19	13	16	24	17	20	26	19	21

PLATTE RIVER BASIN

402114105350101 BIG THOMPSON RIVER BELOW MORAINES PARK NEAR ESTES PARK, CO--Continued
(National Water-Quality Assessment Program station)

TEMPERATURE WATER (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.3	4.3	6.5	17.9	9.7	13.6	17.2	11.7	14.6	15.7	9.2	12.2
2	11.6	4.2	7.4	15.7	10.2	12.9	16.9	10.6	13.8	18.9	9.1	13.7
3	7.9	4.8	6.5	14.2	9.8	12.1	18.2	12.0	14.9	15.2	10.0	12.9
4	7.0	4.7	5.8	15.8	9.7	12.5	17.0	11.3	14.5	18.4	10.2	13.8
5	11.4	3.6	7.1	17.2	9.5	13.0	15.3	12.5	14.0	17.3	9.7	13.8
6	13.0	4.9	8.5	16.2	10.1	13.0	15.7	11.0	13.5	15.1	10.4	13.1
7	11.2	5.1	8.1	17.2	10.0	13.4	16.9	11.2	14.0	16.0	10.6	13.4
8	13.6	5.4	9.0	17.4	10.6	13.7	18.1	10.5	13.9	16.7	11.5	14.2
9	13.8	5.9	9.4	18.0	11.0	14.4	18.3	9.4	13.6	15.4	12.0	13.5
10	12.8	6.4	9.2	19.0	10.8	14.5	19.3	8.7	13.8	14.0	10.9	12.1
11	13.1	5.3	8.9	21.1	11.8	15.7	19.3	9.2	14.0	14.4	9.7	11.8
12	14.0	5.5	9.3	20.1	10.3	15.0	16.3	9.8	12.9	16.1	9.7	12.3
13	13.5	5.9	9.5	18.4	10.0	14.2	18.1	8.4	13.0	12.9	9.0	10.8
14	12.6	6.6	9.6	20.9	9.9	15.0	19.2	9.2	13.8	16.1	7.4	11.4
15	10.9	6.6	8.9	21.4	10.4	15.6	20.2	9.7	14.6	16.1	6.7	11.2
16	13.2	6.4	9.7	21.2	10.8	15.8	17.5	10.4	13.8	15.4	6.8	11.1
17	15.9	6.8	10.8	21.1	11.0	15.7	17.8	9.6	13.7	13.2	7.9	10
18	14.6	7.8	10.5	20.8	11.3	15.7	17.5	8.9	13.3	11.2	6.2	8.6
19	14.3	7.3	10.5	20.0	11.5	15.6	17.6	9.3	13.6	13.3	5.0	8.8
20	15.7	8.8	11.6	16.7	12.3	14.5	16.2	11.0	13.5	14.0	5.2	9.2
21	14.5	8.6	11.2	19.2	11.8	15.0	14.0	10.7	12.5	11.8	6.3	9.1
22	16.8	9.2	12.3	19.7	12.4	15.3	17.3	9.2	13.2	13.8	6.3	9.8
23	16.7	7.9	11.9	16.7	11.7	14.2	17.1	9.4	13.3	13.4	4.8	9.1
24	16.7	8.9	12.4	19.6	11.0	15.1	17.5	9.7	13.8	13.8	5.2	9.3
25	15.2	9.2	11.8	15.8	12.0	13.9	17.9	9.8	14.2	12.0	5.7	9.1
26	15.4	8.8	11.8	19.5	10.9	14.6	18.1	9.9	14.2	13.5	7.4	10.0
27	13.8	8.6	10.9	18.4	10.7	14.2	18.1	11.9	14.6	11.0	5.6	8.3
28	14.5	8.2	11.3	18.6	10.5	14.1	16.8	10.7	13.7	10.2	5.6	8.0
29	18.5	8.8	13.0	21.2	9.3	14.9	14.6	10.9	13.0	11.6	5.5	8.2
30	17.4	9.3	13.0	21.7	10.8	15.9	17.4	9.2	13.3	12.4	3.7	7.8
31	---	---	---	20.1	11.2	15.9	17.5	9.6	13.6	---	---	---
MONTH	18.5	3.6	9.9	21.7	9.3	14.5	20.2	8.4	13.7	18.9	3.7	10.9

PLATTE RIVER BASIN

402231105291900 LAKE ESTES NEAR DAM NEAR ESTES PARK, CO

WATER-QUALITY RECORDS

LOCATION.--Lat. 40°22'31", long 105°29'19", in SE¼ NW¼ sec.29, T.5 N, R.72 W., Larimer County, Hydrologic Unit 14010001, 1 mi southeast of Estes Park.

PERIOD OF RECORD.--May 1998 to current year.

REMARKS.--Samples were collected near-surface and near-bottom at estimated deepest point near Olympus Dam.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SAM-PLING DEPTH (FEET) (00003)	SPE-CIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD WATER) (DEG C) (00010)	TEMPERATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	TRANS-PAR-ENCY (SECCHI DISK) (IN) (00077)	OXYGEN, DIS-SOLVED (MG/L) (00300)	E COLI, MTEC MF (COL/100 ML) (31633)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORPTION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
OCT															
10...	1310	.50	46	7.4	10.5	7.7									
10...	1311	5.00	46	7.4	10.5	7.6									
10...	1312	10.0	46	7.4	10.4	7.6									
10...	1313	15.0	46	7.4	10.4	7.5									
10...	1314	20.0	46	7.4	10.4	7.5									
10...	1315	25.0	46	7.4	10.4	7.4									
10...	1316	30.0	46	7.3	10.3	7.4									
MAY															
14...	1152	.50	47	6.9	8.2	8.9									
14...	1153	5.00	47	7.0	8.0	9.0									
14...	1154	10.0	46	7.0	7.8	8.9									
14...	1155	15.0	46	7.0	7.7	8.9									
14...	1156	20.0	45	7.0	7.5	9.0									
14...	1157	25.0	44	6.9	6.8	8.7									
14...	1158	30.0	43	6.8	6.2	8.2									
AUG															
21...	1122	.50	55	7.5	16.7	7.0									
21...	1123	5.00	55	7.5	16.7	7.0									
21...	1124	10.0	55	7.5	16.7	6.9									
21...	1125	15.0	55	7.5	16.7	6.9									
21...	1126	20.0	55	7.5	16.7	6.9									
21...	1127	25.0	55	7.5	16.7	6.9									

Date	Time	ANC UNFLTRD LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS TOTAL (MG/L AS P) (00665)
OCT														
10...	1320	46	7.4	10.5	72.0	7.7	E5	19	5.58	1.10	2.10	.2	.60	
10...	1335	46	7.3	10.3	--	7.4	--	19	5.69	1.13	2.13	.2	.61	
MAY														
14...	1205	47	6.9	8.2	96.0	8.9	E2	20	6.27	1.12	1.98	.2	.66	
14...	1210	43	6.8	6.2	--	8.2	--	19	5.90	1.06	2.13	.2	.67	
AUG														
21...	1140	55	7.5	16.8	84.0	7.0	E6	22	6.83	1.24	2.07	.2	.58	
21...	1150	55	7.5	16.7	--	6.9	--	22	6.90	1.24	2.13	.2	.50	

E Estimated laboratory analysis value.

402231105291900 LAKE ESTES NEAR DAM NEAR ESTES PARK, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHROMIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)
OCT													
10...	.005	<.007	4.2	5.3	<.5	<10	<.1	<.8	<.02	.3	68	<.08	.8
10...	.005	<.007	3.9	5.4	<.5	<10	<.1	<.8	<.02	E.2	61	<.08	.8
MAY													
14...	E.004	<.007	3.4	5.8	<.5	<10	<.1	<.8	.02	.6	21	<.08	.7
14...	E.002	<.007	3.1	5.6	<.5	<10	E.1	<.8	.02	.5	33	<.08	.7
AUG													
21...	.007	<.007	3.6	5.4	<.5	<10	<.1	<.8	.03	.6	61	<.08	.9
21...	.006	<.007	3.5	5.6	<.5	<10	<.1	1.6	.06	.7	65	E.04	.9

Date	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRONTIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANADIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT							
10...	.7	.4	<.06	<.1	33.4	E.1	1
10...	.7	.4	E.04	<.1	34.4	<.2	1
MAY							
14...	1.5	.3	.19	<.1	35.9	E.1	2
14...	1.6	.3	.20	<.1	34.5	E.1	1
AUG							
21...	.8	.4	.31	<.1	35.0	.3	<1
21...	2.6	.4	1.52	<.1	34.9	.3	<1

E Estimated laboratory analysis value.

06737500 HORSETOOTH RESERVOIR NEAR FORT COLLINS, CO

LOCATION.--Lat 40°36'00", long 105°10'06", in NW 1/4 SW 1/4 sec.6, T.7 N., R.69 W., Larimer County, Hydrologic Unit 10190007, on right bank near abutment of Horsetooth Dam on tributaries to Cache la Poudre River, 4.8 mi west of city hall in Fort Collins.

RESERVOIR ELEVATIONS AND CONTENTS RECORDS

PERIOD OF RECORD.--April 1951 to current year.

GAGE.--Nonrecording gage read at irregular intervals from 1 to 10 days. Datum of gage is 5,430.00 ft above sea level, (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above sea level.

REMARKS.--Reservoir is formed by an earth and rockfill dike and dams closing openings in subsequent valleys between hogbacks; storage began Jan. 10, 1951; dams completed July 21, 1949. Usable capacity, 143,500 acre-ft above elevations 5,320 ft, invert of channel from Spring Canyon Dam, 5,310 ft, invert of channel from Dixon Canyon Dam, 5,270 ft, trashrack sill of outlet at Soldier Canyon Dam, and below maximum water-surface elevation, 5,430 ft, 6 ft below crest of Satanka Dike. Dead storage, 7,003 acre ft. Figures given represent usable contents. Water is diverted from Colorado River basin through Alva B. Adams tunnel for supplemental irrigation supply to Cache la Poudre River. Water-quality sampling at two sites in reservoir.

COOPERATION.--Records provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 148,400 acre-ft, June 26-27, 1995, elevation, 5,429.36 ft; minimum observed, 0 acre-ft, Oct. 6, 2001 and several times in 2001 water year at various elevations, elevation, 5,286.77 ft during repairs to dam and outlet structure minimum observed under normal operating conditions, 9 acre-ft, Nov. 16-30, 1977, elevation, 5,270.25 ft; no storage prior to Apr. 18, 1951.

EXTREMES (AT 0800) FOR CURRENT YEAR.--Maximum contents, observed, 39,290 acre-ft, May 3, elevation, 5,359.23 ft; minimum observed, 0 acre-ft, Oct. 6, elevation, 5,286.77 ft during repairs to dam and outlet structure.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	5,291.42	a0	-
Oct. 31.	5,308.02	1,900	+1,900
Nov. 30.	5,314.98	5,080	+3,180
Dec. 31.	5,322.62	9,180	+4,100
CAL YR 2001	-	-	0
Jan. 31.	5,330.18	13,910	+4,730
Feb. 28.	5,338.75	20,100	+6,190
Mar. 31.	5,349.40	29,230	+9,130
Apr. 30.	5,358.40	38,390	+9,160
May 31.	5,356.69	36,560	-1,830
June 30.	5,348.76	28,620	-7,940
July 31.	5,317.19	6,190	-22,430
Aug. 31.	5,309.03	2,330	-3,860
Sept. 30.	5,312.59	3,930	+1,600
WTR YR 2002.	-	-	+3,930

a Reservoir drawn down below dead storage to allow for repair on the dam and outlet structures.

06737500 HORSETOOTH RESERVOIR NEAR FORT COLLINS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1969 to current year.

REMARKS.--Samples collected near the north end of reservoir near Soldier Canyon Dam.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SAM-PLING DEPTH (FEET) (00003)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD WATER SOLVED) (MG/L) (00300)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	TRANS-PAR-ENCY (SECCHI DISK) (IN) (00077)	OXYGEN, DIS-SOLVED (MG/L) (00300)	E COLI, MTEC MF (COL/100 ML) (31633)	HARD-NESS TOTAL (MG/L AS) (00900)	CALCIUM SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
MAY															
15...	1150	.50	62	7.3	13.3	8.9									
15...	1151	5.00	62	7.3	12.4	8.9									
15...	1152	10.0	62	7.3	12.1	8.7									
15...	1153	15.0	62	7.2	11.9	8.6									
15...	1154	20.0	62	7.2	11.8	8.6									
15...	1155	25.0	62	7.2	11.7	8.6									
15...	1156	30.0	62	7.0	11.1	8.6									
15...	1157	35.0	62	7.0	10.7	8.5									
15...	1158	40.0	61	7.0	10.3	8.6									
15...	1159	45.0	61	7.0	9.5	8.6									
15...	1200	50.0	62	7.0	8.9	8.6									
15...	1201	55.0	62	6.9	8.8	8.6									
15...	1202	60.0	62	7.0	8.6	8.7									
15...	1203	65.0	62	7.0	8.3	8.8									
15...	1204	70.0	62	6.9	8.2	8.8									
15...	1205	75.0	62	6.8	8.2	8.8									
15...	1206	80.0	62	6.8	8.2	8.8									
15...	1207	85.0	62	6.8	8.2	8.6									
15...	1208	90.0	62	6.8	8.2	8.4									
MAY															
15...	1210	62	7.3	13.3	76.0	8.9	E7	26	8.09	1.39	2.21	.2	.77		
15...	1220	62	6.8	8.2	--	8.6	--	26	8.16	1.40	2.30	.2	.78		
MAY															
15...	29	3.8	.76	.1	4.05	47	39	.06	<.002	.063	E.014	.22	.016		
15...	29	4.1	.72	.1	4.20	31	40	.04	E.002	.104	.017	.19	.024		
MAY															
15...	E.004	<.007	3.2	15.3	<.5	<10	<.1	<.8	.04	3.3	E6	<.08	.8		
15...	.009	E.004	2.9	15.8	<.5	<10	<.1	<.8	.02	3.1	<10	<.08	.8		
MAY															
15...			12.2	9.0	.3	.31	<.1	42.2	.3	1					
15...			12.7	3.3	.3	.32	<.1	41.8	.4	<1					

E Estimated laboratory analysis value.

PLATTE RIVER BASIN

403147105083800 HORSETOOTH RESERVOIR NEAR FORT COLLINS, CO

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1983 to current year.

REMARKS.--Samples collected near the south end of reservoir near Spring Canyon Dam.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SAM-PLING DEPTH (FEET) (00003)	SPE-CIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD WATER UNITS) (00400)	TEMPERATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)										
MAY																
15...	1102	.50	57	7.2	11.3	8.7										
15...	1103	5.00	56	7.1	11.2	8.7										
15...	1104	10.0	56	7.2	10.8	8.9										
15...	1105	15.0	55	7.0	9.9	8.8										
15...	1106	20.0	54	6.8	9.3	8.8										
15...	1107	25.0	55	6.7	8.7	8.9										
15...	1108	30.0	56	6.7	8.4	8.8										
15...	1109	35.0	56	6.7	8.1	8.8										
15...	1110	40.0	56	6.8	7.7	8.8										
15...	1111	45.0	56	6.8	7.5	8.6										
15...	1112	50.0	56	6.8	7.3	8.6										
15...	1113	55.0	56	6.8	7.1	8.5										
15...	1114	60.0	56	6.7	7.0	8.2										
15...	1115	65.0	57	6.7	6.9	7.9										
15...	1116	70.0	57	6.7	6.9	7.9										
Date	Time	SPE-CIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD WATER UNITS) (00400)	TEMPERATURE (DEG C) (00010)	TRANS-PAR-ENCY (SECCHI DISK) (IN) (00077)	OXYGEN, DIS-SOLVED (MG/L) (00300)	E COLI, MTEC MF (COL/100 ML) (31633)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORPTION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)			
MAY																
15...	1120	57	7.2	11.3	108	8.7	E3	24	7.30	1.27	2.28	.2	.75			
15...	1130	57	6.7	6.9	--	7.9	--	24	7.39	1.28	2.31	.2	.75			
Date	Time	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS TOTAL (MG/L AS P) (00665)		
MAY																
15...	27	3.1	.81	.11	3.98	33	36	.04	<.002	.020	.020	.19	.009			
15...	27	3.1	.54	.11	4.23	31	36	.04	<.002	.014	.068	.27	.020			
Date	Time	PHOSPHORUS, DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOSPHATE, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYLLIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM, DIS-SOLVED (UG/L AS CD) (01025)	CHROMIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM, DIS-SOLVED (UG/L AS LI) (01130)		
MAY																
15...	E.002	<.007	3.0	11.4	<.5	<10	<.1	<.8	.03	4.4	16	<.08	.8			
15...	.008	<.007	3.0	10.1	<.5	<10	<.1	<.8	.03	3.8	<10	<.08	.8			
Date	Time	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRONTIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANADIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)							
MAY																
15...		7.6	5.8	.3	.27	<.1	40.4	.2	1							
15...		15.3	2.5	.3	.28	<.1	41.5	.2	1							

E Estimated laboratory analysis value.

06738000 BIG THOMPSON RIVER AT MOUTH OF CANYON, NEAR DRAKE, CO

LOCATION.--Lat 40°25'18", long 105°13'34", in SW¹/₄SW¹/₄ sec.3, T.5 N., R.70 W., Larimer County, Hydrologic Unit 10190006, on right bank at mouth of canyon, 400 ft upstream from Handy Ditch diversion dam, and 6.0 mi east of Drake.

DRAINAGE AREA.--305 mi².

PERIOD OF RECORD.--August 1887 to September 1892, May 1895 to September 1903, October 1926 to September 1933 (no winter records prior to October 1932, except water years 1927-28), April 1938 to September 1949, March 1951 to current year. Monthly discharge only for some periods, published in WSP 1310. Published as Big Thompson Creek at Arkins 1887-92, Big Thompson Creek near Arkins 1901-3, and as Thompson River at mouth of canyon, near Drake 1927-30, 1938-47.

REVISED RECORDS.--WSP 1310: 1891, 1927. WSP 1730: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Datum of gage is 5,305.47 ft above sea level (levels by U.S. Bureau of Reclamation). Oct. 1, 1949 to Sept. 18, 1977, at present site, datum 8.00 ft lower, Sept. 19, 1977 to July 27, 1980, at present site, datum 7.37 ft lower. See WSP 1710 or 1730 for history of changes prior to Oct. 1, 1949.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation. Diversions from Colorado River basin to Big Thompson River basin upstream from station through Alva B. Adams tunnel began Aug. 10, 1947; since Apr. 15, 1953, this imported water has been diverted from Lake Estes through Olympus tunnel bypassing this station. Part of the natural flow of the Big Thompson River has also been diverted through Olympus tunnel since May 17, 1955, and Dille tunnel since Apr. 20, 1959, and may be returned to the river just downstream from this station.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,200 ft³/s, July 31, 1976, gage height, 19.86 ft from floodmarks, from slope-area measurements of peak flow; no flow at times in 1976 (all flow above station diverted through Olympus and Dille tunnels after flood of July 31, 1976), 1979-80 (all flow above station diverted through Dille tunnel).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 266 ft³/s, May 31, gage height, 3.08 ft; minimum daily, 21 ft³/s, Nov. 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	56	38	e29	e28	e26	28	43	87	64	59	38
2	79	55	43	e29	e26	e27	29	50	93	67	58	37
3	64	54	46	e29	e26	e26	24	56	78	72	56	30
4	52	46	34	e28	e27	e26	27	57	87	68	62	42
5	68	53	31	e29	e27	e26	28	57	79	62	71	54
6	66	57	36	e29	e26	e26	29	55	83	63	84	54
7	62	52	e35	e28	e26	e26	28	55	64	66	86	54
8	59	43	e44	e28	e27	e27	28	66	61	65	81	55
9	58	42	e43	e30	e27	e27	27	86	64	60	88	59
10	60	36	e33	e30	e26	e27	25	76	77	58	84	59
11	57	36	e40	e29	e27	e28	29	66	60	59	78	55
12	54	35	e41	e30	e27	e29	28	69	60	56	76	77
13	48	39	e37	e28	e27	e29	29	61	65	51	69	93
14	45	37	e35	e28	e27	e29	28	66	64	58	69	93
15	80	33	e35	e29	e28	27	32	65	62	73	65	85
16	96	44	e44	e28	e28	28	48	69	67	66	58	84
17	101	46	e29	e28	e28	27	52	69	69	59	57	83
18	113	59	e34	e27	e28	27	48	98	64	62	54	72
19	101	64	e32	e29	e28	26	49	112	66	59	46	53
20	109	59	e22	e27	e29	26	52	124	66	63	45	49
21	116	64	e30	e26	e28	26	50	162	62	61	44	48
22	120	52	e31	e27	e30	26	48	215	60	67	43	45
23	127	40	e29	e26	e29	27	45	208	59	80	44	41
24	133	38	e28	e28	e29	25	39	177	59	88	46	44
25	132	36	e30	e28	e29	25	37	156	58	92	45	41
26	110	45	e30	e28	e28	27	36	148	60	92	43	45
27	141	34	e29	e29	e27	28	41	147	60	89	45	44
28	123	21	e28	e28	e27	29	46	148	63	78	42	53
29	107	33	e29	e27	---	28	47	158	65	65	42	51
30	87	40	e29	e27	---	28	40	183	61	63	42	48
31	65	---	e27	e28	---	28	---	121	---	62	41	---
TOTAL	2706	1349	1052	874	770	837	1097	3223	2023	2088	1823	1686
MEAN	87.3	45.0	33.9	28.2	27.5	27.0	36.6	104	67.4	67.4	58.8	56.2
MAX	141	64	46	30	30	29	52	215	93	92	88	93
MIN	45	21	22	26	26	25	24	43	58	51	41	30
AC-FT	5370	2680	2090	1730	1530	1660	2180	6390	4010	4140	3620	3340
CAL YR 2001	TOTAL	26627.8	MEAN	73.0	MAX	355	MIN	7.8	AC-FT	52820		
WTR YR 2002	TOTAL	19528	MEAN	53.5	MAX	215	MIN	21	AC-FT	38730		

e Estimated.

06741510 BIG THOMPSON RIVER AT LOVELAND, CO

LOCATION.--Lat 40°22'43", long 105°03'38", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.24, T.5 N., R.69 W., Larimer County, Hydrologic Unit 10190006, on right bank 690 ft downstream from county road bridge C-13, 1.7 mi south of sugar refinery in Loveland, and 1.9 mi downstream from Farmers Ditch diversion.

DRAINAGE AREA.--535 mi².

PERIOD OF RECORD.--July 1979 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,906 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, diversions for irrigation, and return flow from irrigated areas. Water-quality data for this site is included in the "Big Thompson Project" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	7.2	13	12	12	12	3.8	57	61	e66	55	49
2	15	25	13	e13	16	16	3.6	62	75	e71	58	43
3	8.4	19	13	e12	15	17	3.8	68	63	e69	62	38
4	4.7	16	12	12	12	17	3.9	70	87	e73	64	21
5	0.90	16	12	12	11	12	6.6	65	69	e90	76	27
6	1.0	16	12	11	12	17	3.9	59	78	e73	73	42
7	0.95	16	12	11	12	22	6.8	62	79	e72	76	30
8	9.0	20	12	11	12	20	7.9	69	86	e78	83	34
9	13	16	11	12	11	12	7.9	70	94	e81	73	49
10	11	16	11	14	e11	12	7.3	66	120	e79	72	46
11	20	16	12	12	10	11	7.7	63	110	e80	75	46
12	16	16	12	11	10	11	7.8	76	94	e87	73	53
13	12	15	12	11	9.8	11	7.6	70	99	e83	68	50
14	14	14	12	11	10	15	6.7	70	100	e83	72	41
15	16	15	12	11	10	12	6.7	69	94	e86	75	34
16	19	14	13	11	10	13	6.4	72	98	e92	70	30
17	13	14	12	e11	11	11	7.0	73	92	e94	63	33
18	15	15	12	e11	11	12	7.9	69	92	e97	64	32
19	19	15	12	e12	11	12	11	44	91	e100	59	31
20	121	14	12	e12	11	12	11	49	84	e78	51	28
21	20	14	12	e12	e11	11	11	61	83	e68	55	31
22	20	14	12	11	11	7.7	11	59	90	e73	56	30
23	19	14	12	12	11	7.1	26	70	94	e78	60	26
24	15	13	12	e12	11	7.1	51	122	88	e67	57	26
25	11	18	12	e12	11	7.2	56	51	77	e69	57	26
26	8.3	19	12	12	12	6.1	58	46	e61	e77	59	27
27	5.0	14	12	11	11	4.8	62	48	e61	e66	64	26
28	3.8	13	12	11	11	4.1	65	53	e70	e62	55	29
29	4.1	13	12	e12	---	3.9	63	52	e69	e70	59	33
30	4.8	13	12	e12	---	3.9	57	44	e61	59	57	29
31	4.3	---	12	e12	---	4.0	---	55	---	57	49	---
TOTAL	447.65	460.2	374	362	316.8	343.9	595.3	1964	2520	2378	1990	1040
MEAN	14.4	15.3	12.1	11.7	11.3	11.1	19.8	63.4	84.0	76.7	64.2	34.7
MAX	121	25	13	14	16	22	65	122	120	100	83	53
MIN	0.90	7.2	11	11	9.8	3.9	3.6	44	61	57	49	21
AC-FT	888	913	742	718	628	682	1180	3900	5000	4720	3950	2060

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2002, BY WATER YEAR (WY)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	30.8	21.2	13.1	17.1	16.9	13.1	43.7	221	287	115	75.4	37.3												
MAX	111	95.8	51.9	95.5	129	61.4	292	2078	1493	418	153	83.9												
(WY)	1998	1985	1998	1998	1998	1998	1980	1980	1983	1995	1981	1982												
MIN	6.15	3.10	2.86	2.55	2.42	2.19	3.49	4.07	25.0	29.9	29.0	16.6												
(WY)	1988	2001	1993	1994	1993	1996	2001	1981	1982	1987	1997	1990												

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1979 - 2002

ANNUAL TOTAL	9933.15	12791.85		
ANNUAL MEAN	27.2	35.0	74.5	
HIGHEST ANNUAL MEAN			321	1980
LOWEST ANNUAL MEAN			28.4	1990
HIGHEST DAILY MEAN	235	Aug 10	4240	May 1 1980
LOWEST DAILY MEAN	0.90	Oct 5	0.80	May 11 1981
ANNUAL SEVEN-DAY MINIMUM	2.2	Apr 14	3.8	Mar 29
MAXIMUM PEAK FLOW			238	Jun 10
MAXIMUM PEAK STAGE			2.37	Jun 10
ANNUAL RUNOFF (AC-FT)	19700	25370	53980	
10 PERCENT EXCEEDS	74	78	129	
50 PERCENT EXCEEDS	13	16	19	
90 PERCENT EXCEEDS	3.8	7.9	3.4	

e Estimated.

a From high-water mark.

b Maximum gage height, 10.48 ft, Apr 30, 1999.

06742500 CARTER LAKE NEAR BERTHOUD, CO

LOCATION.--Lat 40°19'28", long 105°12'41", in SE¼ sec.10, T.4 N., R.70 W., Larimer County, Hydrologic Unit 10190006, in hoist house 293 ft from right abutment of Carter Lake Dam on Dry Creek, 7.0 mi west of Berthoud, and 8.9 mi upstream from mouth. Water-quality sampling site near center of reservoir.

RESERVOIR ELEVATIONS AND CONTENTS RECORDS

PERIOD OF RECORD.--March 1954 to current year.

GAGE.--Nonrecording gage read at irregular intervals from 1 to 13 days. Datum of gage is 5,763.00 ft above sea level, (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above sea level.

REMARKS.--Reservoir is formed by an earth and rockfill dam and dikes enlarging the natural basin of Carter Lake. Storage began in February 1954. Usable capacity, 113,500 acre-ft between elevations 5,618.00 ft, trashrack sill at outlet, and 5,763.00 ft, maximum water surface, 6 ft below crest of dam. Dead storage, 3,306 acre-ft. Figures given represent usable contents. Water diverted from Colorado River basin through Alva B. Adams tunnel is pumped from Flatiron Reservoir into Carter Lake for supplemental irrigation supply to Little Thompson River and St. Vrain and Boulder Creek basins. Water above elevation 5,620 ft may be released for return to Flatiron Reservoir where pump turbines can operate in reverse to generate power and water can be used for irrigation in Big Thompson or Cache la Poudre River basins.

COOPERATION.--Records provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 109,100 acre-ft, Apr. 27-29, 1971, elevation, 5,759.12 ft; minimum observed since appreciable storage was attained, 960 acre-ft, Oct. 25, 1954, elevation, 5,621.40 ft.

EXTREMES (AT 0800) FOR CURRENT YEAR.--Maximum contents, 108,600 acre-ft, Mar. 28, elevation, 5,758.72 ft; minimum contents, 27,050 acre-ft, Nov. 13, elevation, 5,672.61 ft.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	5,686.52	37,590	-
Oct. 31.	5,674.38	28,320	-9,270
Nov. 30.	5,686.80	37,810	+9,490
Dec. 31.	5,711.80	59,600	+21,790
CAL YR 2001	-	-	-10,940
Jan. 31.	5,731.43	78,950	+19,350
Feb. 28.	5,746.12	94,530	+15,580
Mar. 31.	5,758.56	108,400	+13,870
Apr. 30.	5,752.83	102,000	-6,500
May 31.	5,750.54	99,390	-2,510
June 30.	5,750.79	99,670	+280
July 31.	5,732.70	80,260	-19,410
Aug. 31.	5,715.10	62,720	-17,540
Sept. 30.	5,705.54	53,830	-8,890
WTR YR 2002.	-	-	+16,240

PLATTE RIVER BASIN

06742500 CARTER LAKE NEAR BERTHOUD, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1970 to current year.

REMARKS.--Samples collected near the southeast end of reservoir.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT						
10...	0900	.50	65	7.0	15.3	6.6
10...	0901	5.00	65	7.0	15.3	6.5
10...	0902	10.0	65	7.0	15.3	6.4
10...	0903	15.0	65	7.1	15.3	6.4
10...	0904	20.0	65	7.0	15.3	6.4
10...	0905	25.0	65	7.0	15.3	6.4
10...	0906	30.0	64	7.0	15.3	6.4
10...	0907	35.0	64	7.0	15.3	6.3
10...	0908	40.0	64	7.0	15.3	6.3
10...	0909	45.0	63	6.8	15.1	6.0
10...	0910	50.0	54	6.5	13.3	4.0
10...	0911	55.0	52	6.3	12.0	3.6
10...	0912	60.0	49	6.3	10.9	3.9
10...	0913	65.0	49	6.3	10.2	3.6
10...	0914	70.0	49	6.2	10.1	3.4
MAY						
14...	0912	.50	60	8.4	10.0	9.4
14...	0913	5.00	59	8.4	9.8	9.5
14...	0914	10.0	59	8.4	9.7	9.5
14...	0915	15.0	59	8.4	9.3	9.6
14...	0916	20.0	58	8.4	8.7	9.7
14...	0917	25.0	58	8.4	8.4	9.7
14...	0918	30.0	58	8.3	8.2	9.7
14...	0919	35.0	58	8.3	7.8	9.8
14...	0920	40.0	58	8.3	7.7	9.8
14...	0921	45.0	57	8.2	7.0	9.6
14...	0922	50.0	57	8.1	6.8	9.5
14...	0923	55.0	57	8.0	6.4	9.4
14...	0924	60.0	57	8.0	6.2	9.4
14...	0925	65.0	57	8.0	6.1	9.4
14...	0926	70.0	57	8.0	6.0	9.4
14...	0927	75.0	57	8.0	6.0	9.4
14...	0928	80.0	56	7.9	6.0	9.3
14...	0929	85.0	57	7.9	5.9	9.3
14...	0930	90.0	56	7.9	5.9	9.2
14...	0931	100	56	7.9	5.8	9.2
14...	0932	110	57	7.8	5.6	9.2
14...	0933	120	57	7.8	5.5	9.1
14...	0934	130	57	7.8	5.5	9.0
14...	0935	140	57	7.8	5.4	9.0
14...	0936	150	57	7.7	5.4	8.9
AUG						
21...	0854	.50	73	7.4	20.0	6.8
21...	0855	5.00	72	7.3	20.0	6.8
21...	0856	10.0	72	7.3	19.9	6.7
21...	0857	15.0	72	7.4	19.9	6.8
21...	0858	20.0	72	7.4	19.9	6.8
21...	0859	25.0	71	7.1	19.1	6.4
21...	0900	30.0	65	6.8	16.8	5.9
21...	0901	35.0	59	6.6	12.5	5.8
21...	0902	40.0	58	6.6	11.4	5.7
21...	0903	45.0	57	6.6	10.8	5.7
21...	0904	50.0	56	6.6	10.3	5.8
21...	0905	55.0	57	6.6	10.1	5.6
21...	0906	60.0	56	6.6	9.9	5.9
21...	0907	65.0	56	6.6	9.8	5.9
21...	0908	70.0	56	6.6	9.7	5.9
21...	0909	75.0	56	6.6	9.6	5.9
21...	0910	80.0	56	6.6	9.4	5.8
21...	0911	85.0	56	6.6	9.4	5.7
21...	0912	90.0	56	6.5	9.3	5.6
21...	0913	100	56	6.5	8.9	5.2
21...	0914	110	57	6.5	8.7	4.8

PLATTE RIVER BASIN

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06742500 CARTER LAKE NEAR BERTHOUD, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK (IN) (00077)	OXYGEN, DIS- SOLVED (MG/L) (00300)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
OCT													
10...	0935	65	7.0	15.3	108	6.6	<1	28	9.05	1.18	1.86	.2	.60
10...	0950	49	6.3	10.2	--	3.6	--	20	6.41	1.01	1.59	.2	.58
MAY													
14...	0950	60	8.4	10.0	144	9.4	<1	25	8.11	1.23	2.07	.2	.67
14...	1000	57	7.8	5.4	--	9.0	--	25	7.90	1.20	2.20	.2	.68
AUG													
21...	0930	73	7.4	20.0	--	6.8	<1	31	10.2	1.39	2.12	.2	.70
21...	0945	57	6.5	8.7	100	4.8	--	25	7.89	1.25	1.99	.2	.63

Date	Time	ANC UNFLTRD TIT 4.5 LAB (MG/L SOLVED AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
OCT														
10...	31	2.6	.65	.2	1.48	40	36	.05	<.002	<.013	<.015	.17	.008	
10...	24	2.5	.97	E.1	3.64	36	31	.05	<.002	.053	E.012	.14	.011	
MAY														
14...	29	2.8	.66	.1	2.60	39	35	.05	<.002	<.013	<.015	.17	.007	
14...	28	2.8	.67	.1	2.97	22	36	.03	<.002	<.013	E.013	.18	.008	
AUG														
21...	36	2.7	.62	.2	1.32	46	41	.06	<.002	<.013	<.015	.17	.011	
21...	29	2.5	.58	.2	3.61	45	37	.06	<.002	.078	<.015	.14	.014	

Date	Time	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)
OCT														
10...		<.004	<.007	3.6	22.0	<.5	<10	<.1	<.8	<.02	1.0	<10	<.08	.8
10...		.005	<.007	3.3	11.5	<.5	<10	<.1	<.8	<.02	1.3	E10	<.08	.7
MAY														
14...		<.004	<.007	3.1	13.6	<.5	<10	<.1	<.8	.02	1.6	<10	<.08	.8
14...		E.003	<.007	3.0	13.1	<.5	<10	<.1	<.8	.02	1.9	<10	<.08	.8
AUG														
21...		E.003	<.007	3.3	24.7	<.5	<10	E.1	<.8	.03	1.6	<10	<.08	.9
21...		.009	E.005	2.9	12.9	<.5	<10	<.1	<.8	.02	1.9	<10	<.08	.9

Date	Time	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
OCT									
10...		15.2	.7	.3	<.06	<.1	38.8	.3	<1
10...		46.7	28.6	.3	<.06	<.1	33.0	<.2	<1
MAY									
14...		3.8	.5	.3	.27	<.1	39.7	.2	<1
14...		6.8	1.5	.3	.24	<.1	39.5	E.2	<1
AUG									
21...		<2.4	.2	.3	.40	<.1	37.9	.4	<1
21...		6.2	.5	.3	.34	<.1	34.3	E.2	1

E Estimated laboratory analysis value.

06746095 JOE WRIGHT CREEK ABOVE JOE WRIGHT RESERVOIR, CO

LOCATION.--Lat 40°32'24", long 105°52'56", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.26, T.7 N., R.76 W., Larimer County, Hydrologic Unit 10190007, on left bank 150 ft downstream from unnamed tributary and Colorado Highway 14 culvert crossing, 1.5 mi northeast of Cameron Pass, 1.5 mi southwest of Joe Wright Dam, and 8 mi east of Gould.

DRAINAGE AREA.--3.01 mi².

PERIOD OF RECORD.--October 1978 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,990 ft above sea level, from topographic map. Prior to Aug. 7, 1989, at datum 3.40 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	e2.3	e1.9	e1.5	e0.94	e0.80	e0.76	e1.6	58	4.4	0.95	0.41
2	3.8	e2.3	e1.9	e1.5	e0.94	e0.77	e0.80	e1.6	59	3.9	0.95	0.38
3	3.6	e2.3	e1.9	e1.5	e0.90	e0.77	e0.83	e1.7	46	3.7	0.98	0.38
4	3.7	e2.5	e1.9	e1.5	e0.90	e0.76	e0.83	e1.8	44	3.7	0.98	0.38
5	3.4	e2.4	e1.9	e1.4	e0.90	e0.76	e0.85	e1.9	44	4.0	1.2	0.38
6	3.3	e2.4	e1.9	e1.4	e0.90	e0.76	e0.85	e2.0	39	3.8	1.1	0.38
7	3.3	e2.3	e1.9	e1.4	e0.90	e0.76	e0.86	e2.2	37	3.5	1.9	0.38
8	3.2	e2.2	e1.9	e1.4	e0.90	e0.76	e0.86	e2.3	40	3.2	1.7	0.38
9	3.6	e2.3	e1.9	e1.3	e0.90	e0.76	e0.87	e2.5	40	2.9	e1.1	0.63
10	4.7	e2.3	e1.9	e1.3	e0.90	e0.76	e0.87	e2.4	37	2.6	e0.95	0.50
11	e4.0	e2.3	e1.9	e1.3	e0.90	e0.77	e0.87	e2.4	32	2.4	e0.87	1.2
12	e3.7	e2.3	e1.9	e1.2	e0.90	e0.77	e0.94	e2.5	30	2.1	e0.83	1.1
13	e3.4	e2.2	e1.8	e1.2	e0.90	e0.76	e0.94	e2.6	27	2.0	e0.80	0.93
14	e3.3	e2.2	e1.8	e1.2	e0.90	e0.77	e0.94	e2.7	26	2.0	e0.76	0.66
15	e3.3	e2.2	e1.8	e1.2	e0.90	e0.77	e1.0	e2.9	24	1.9	e0.73	0.63
16	e3.5	e2.2	e1.8	e1.1	e0.90	e0.77	e1.1	2.7	23	1.7	e0.70	0.55
17	e3.3	e2.2	e1.8	e1.1	e0.90	e0.76	e1.1	3.5	22	1.7	e0.67	0.52
18	3.1	e2.2	e1.8	e1.1	e0.90	e0.77	e1.2	5.4	21	1.5	e0.65	0.79
19	e3.0	e2.2	e1.8	e1.1	e0.90	e0.77	e1.2	7.0	22	1.5	e0.63	0.89
20	2.9	e2.2	e1.8	e1.0	e0.90	e0.77	e1.3	8.5	22	3.0	e0.62	0.65
21	2.8	e2.1	e1.8	e1.0	e0.90	e0.76	e1.4	15	22	3.1	e0.65	0.52
22	2.7	e2.1	e1.8	e1.0	e0.85	e0.77	e1.4	20	21	2.0	e0.68	0.50
23	2.6	e2.1	e1.7	e1.0	e0.85	e0.75	e1.4	16	18	1.7	e0.63	0.50
24	e2.6	e2.1	e1.7	e1.0	e0.85	e0.73	e1.5	12	17	1.7	e0.60	0.50
25	e2.6	e2.0	e1.7	e1.0	e0.80	e0.70	e1.5	13	15	1.9	e0.57	0.51
26	e2.6	e2.1	e1.6	e1.0	e0.80	e0.70	e1.5	15	15	1.8	e0.55	0.70
27	e2.6	e2.0	e1.7	e1.0	e0.80	e0.67	e1.4	16	14	1.2	e0.53	0.60
28	e2.6	e2.0	e1.6	e0.97	e0.80	e0.68	e1.6	21	13	1.1	e0.50	0.50
29	2.6	e2.0	e1.6	e0.97	---	e0.70	e1.6	28	8.0	1.0	0.57	0.61
30	2.5	e2.0	e1.6	e0.97	---	e0.73	e1.6	48	4.8	0.99	0.51	0.65
31	2.3	---	e1.6	e0.94	---	e0.73	---	55	---	0.95	0.50	---
TOTAL	98.8	66.0	55.6	36.55	24.73	23.26	33.87	319.2	840.8	72.94	25.36	17.71
MEAN	3.187	2.200	1.794	1.179	0.883	0.750	1.129	10.30	28.03	2.353	0.818	0.590
MAX	4.7	2.5	1.9	1.5	0.94	0.80	1.6	55	59	4.4	1.9	1.2
MIN	2.3	2.0	1.6	0.94	0.80	0.67	0.76	1.6	4.8	0.95	0.50	0.38
AC-FT	196	131	110	72	49	46	67	633	1670	145	50	35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2002, BY WATER YEAR (WY)

	3.012	1.518	1.044	0.864	0.743	0.727	1.133	14.17	51.87	26.22	8.280	4.363
MEAN	3.012	1.518	1.044	0.864	0.743	0.727	1.133	14.17	51.87	26.22	8.280	4.363
MAX	10.5	3.51	2.50	2.39	1.79	1.50	3.39	34.6	88.5	90.8	21.5	17.3
(WY)	1998	1998	1998	1998	1998	1994	1994	1994	1988	1995	1995	1997
MIN	0.54	0.36	0.28	0.25	0.20	0.20	0.39	3.58	25.5	2.35	0.82	0.59
(WY)	1981	1979	1981	1981	1979	1979	1979	1982	1989	2002	2002	2002

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1979 - 2002

	2930.18	1614.82	9.504
ANNUAL TOTAL	2930.18	1614.82	9.504
ANNUAL MEAN	8.028	4.424	16.9
HIGHEST ANNUAL MEAN			4.42
LOWEST ANNUAL MEAN			1995
HIGHEST DAILY MEAN	77	Jun 3	150
LOWEST DAILY MEAN	e0.74	Mar 14	a,e0.20
ANNUAL SEVEN-DAY MINIMUM	e0.75	Mar 10	e0.20
MAXIMUM PEAK FLOW			238
MAXIMUM PEAK STAGE			b5.60
ANNUAL RUNOFF (AC-FT)	5810	3200	6890
10 PERCENT EXCEEDS	22	13	30
50 PERCENT EXCEEDS	2.6	1.5	1.6
90 PERCENT EXCEEDS	0.86	0.66	0.49

e Estimated.

a Also occurred Jan 31 to Apr 4, 1979, and Feb 9 to Apr 9, 1981.

b Maximum gage height, 10.64 ft, May 15, 1993, present datum, backwater from ice.

06746110 JOE WRIGHT CREEK BELOW JOE WRIGHT RESERVOIR, CO

LOCATION.--Lat 40°33'43", long 105°51'48", in SE¹/₄NE¹/₄ sec.24, T.7 N., R.76 W., Larimer County, Hydrologic Unit 10190007, on left bank 500 ft downstream from unnamed tributary, 2,000 ft downstream from Joe Wright Dam, and 3 mi southwest of Chambers Lake.

DRAINAGE AREA.--6.90 mi².

PERIOD OF RECORD.--June 1978 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,710 ft above sea level, from topographic map. Prior to Aug. 7, 1989, at datum 0.50 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Joe Wright Reservoir, 2000 ft upstream. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	2.5	e2.6	e2.6	e2.6	e2.7	e2.7	5.2	9.1	7.5	2.1	54
2	2.8	2.5	e2.6	e2.6	e2.6	e2.6	e2.7	4.9	9.3	7.4	2.1	53
3	2.8	2.5	e2.6	e2.6	e2.6	e2.7	e2.6	4.9	9.2	7.3	2.1	51
4	2.8	2.5	e2.6	e2.6	e2.6	e2.6	e2.6	5.1	9.6	7.1	20	50
5	2.8	e2.6	e2.6	e2.6	e2.6	e2.6	e2.5	5.1	9.2	7.1	29	48
6	2.8	e2.6	e2.6	e2.6	e2.6	e2.6	e2.5	5.7	9.3	7.1	27	47
7	2.8	e2.6	e2.6	e2.6	e2.6	e2.6	e2.5	6.3	9.3	7.1	24	46
8	2.8	e2.6	e2.6	e2.6	e2.6	e2.6	2.3	6.2	9.5	7.1	24	45
9	2.8	e2.6	e2.6	e2.6	e2.6	e2.7	2.3	6.2	9.5	7.1	25	45
10	2.8	e2.6	e2.6	e2.6	e2.6	e2.6	2.3	7.9	9.4	6.7	25	45
11	2.7	e2.6	e2.6	e2.6	e2.6	e2.7	2.3	9.2	9.3	6.0	24	45
12	2.8	e2.6	e2.6	e2.6	e2.7	e2.6	2.3	9.1	9.0	4.9	24	36
13	2.8	e2.6	e2.6	e2.6	e2.7	e2.6	2.4	9.3	9.0	3.6	24	6.1
14	2.8	e2.6	e2.6	e2.6	e2.7	e2.6	2.5	7.7	9.0	3.1	24	6.1
15	2.8	e2.6	e2.6	e2.6	e2.7	e2.6	2.5	6.3	8.9	2.8	24	6.1
16	2.8	e2.6	e2.6	e2.6	e2.7	e2.6	2.4	6.1	8.9	2.6	23	6.1
17	2.8	e2.6	e2.6	e2.6	e2.7	e2.6	2.4	6.5	8.8	2.4	23	6.1
18	2.8	e2.6	e2.6	e2.6	e2.7	e2.6	2.4	6.8	8.7	2.3	23	6.1
19	2.8	e2.6	e2.6	e2.6	e2.7	e2.7	2.4	7.3	8.6	2.3	22	5.3
20	2.5	e2.6	e2.6	e2.6	e2.7	e2.7	2.3	7.5	8.6	2.5	22	3.5
21	2.5	e2.6	e2.6	e2.6	e2.7	e2.7	2.3	7.7	8.2	2.4	19	3.4
22	2.5	e2.6	e2.6	e2.6	e2.7	e2.7	2.3	7.1	8.0	2.3	17	3.4
23	2.5	e2.6	e2.6	e2.6	e2.7	e2.7	2.4	6.7	8.0	2.3	17	3.3
24	2.5	e2.6	e2.6	e2.6	e2.7	e2.7	2.5	6.7	8.0	2.3	17	3.0
25	2.5	e2.6	e2.6	e2.6	e2.7	e2.7	2.5	7.0	7.9	2.3	45	2.5
26	2.5	e2.6	e2.6	e2.6	e2.7	e2.7	2.6	7.0	7.8	2.3	60	2.0
27	2.5	e2.6	e2.6	e2.6	e2.7	e2.7	2.6	7.3	7.6	2.3	60	1.5
28	2.5	e2.6	e2.6	e2.6	e2.7	e2.7	2.5	7.5	7.5	2.2	61	1.5
29	2.5	e2.6	e2.6	e2.6	---	e2.7	3.9	7.9	7.5	2.1	59	1.6
30	2.5	e2.6	e2.6	e2.6	---	e2.7	5.3	8.8	7.5	2.1	56	1.5
31	2.5	---	e2.6	e2.6	---	e2.7	---	9.0	---	2.1	56	---
TOTAL	105.3	77.6	80.6	80.6	74.5	82.3	77.8	216.0	260.2	128.7	880.3	634.1
MEAN	3.397	2.587	2.600	2.600	2.661	2.655	2.593	6.968	8.673	4.152	28.40	21.14
MAX	25	2.6	2.6	2.6	2.7	2.7	5.3	9.3	9.6	7.5	61	54
MIN	2.5	2.5	2.6	2.6	2.6	2.6	2.3	4.9	7.5	2.1	2.1	1.5
AC-FT	209	154	160	160	148	163	154	428	516	255	1750	1260

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2002, BY WATER YEAR (WY)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	4.280	2.811	1.027	0.915	0.874	0.906	1.077	12.79	59.22	35.91	30.18	31.57												
MAX	20.8	37.8	2.91	2.60	2.66	2.65	3.14	48.0	100	90.8	84.7	61.8												
(WY)	1995	2001	2001	2002	2002	2002	2001	1998	1996	1993	1991	1995												
MIN	0.54	0.34	0.21	0.24	0.22	0.23	0.29	1.21	8.67	2.49	6.44	1.13												
(WY)	1989	1995	1993	1993	1995	1995	1991	1980	2002	1989	1981	1991												

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1979 - 2002

ANNUAL TOTAL	4418.6	2698.0		
ANNUAL MEAN	12.11	7.392	15.14	
HIGHEST ANNUAL MEAN			24.4	1997
LOWEST ANNUAL MEAN			3.69	1980
HIGHEST DAILY MEAN	81	Jun 2	245	Jul 1 1993
LOWEST DAILY MEAN	e2.1	Mar 2	0.17	Apr 3 1991
ANNUAL SEVEN-DAY MINIMUM	e2.2	Feb 24	1.9	Sep 24 1991
MAXIMUM PEAK FLOW			70	Sep 12 1991
MAXIMUM PEAK STAGE			1.65	Sep 12 1991
ANNUAL RUNOFF (AC-FT)	8760	5350	10970	
10 PERCENT EXCEEDS	50	21	56	
50 PERCENT EXCEEDS	2.8	2.7	2.0	
90 PERCENT EXCEEDS	2.2	2.5	0.35	

e Estimated.

a Maximum gage height, 2.78 ft, Jul 10, 1997.

06751150 NORTH FORK CACHE LA POUFRE RIVER BELOW HALLIGAN RESERVOIR NEAR VIRGINIA DALE, CO

LOCATION.--Lat 40°52'42", long 105°20'15", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.34, T.11 N., R.71 W., Larimer County, Hydrologic Unit 10190007, on left bank 500 ft downstream from Halligan Dam, 4.0 mi west of Highway 287, and 5.0 mi south of Virginia Dale.

DRAINAGE AREA.--355 mi².

PERIOD OF RECORD.--March 1998 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,310 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Natural flow affected by transbasin diversions, storage reservoirs, and irrigation. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data for Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.1	4.9	2.8	3.3	3.0	2.7	3.6	4.0	24	1.4	73	99
2	4.5	4.9	2.6	3.3	3.0	2.7	2.0	3.9	68	2.6	72	78
3	4.5	4.9	2.2	3.3	3.0	2.7	1.9	3.9	78	3.0	44	67
4	4.7	4.8	2.2	3.3	3.0	10	1.9	3.9	77	3.0	10	33
5	3.9	4.5	2.5	3.3	3.0	52	1.9	3.9	76	3.0	4.0	4.7
6	3.5	3.2	3.1	3.3	3.0	84	1.9	3.7	76	3.0	3.4	4.6
7	3.9	2.8	3.0	2.9	3.0	89	1.9	3.7	75	3.1	3.5	4.6
8	4.4	2.8	3.0	2.4	3.0	93	1.9	3.7	75	28	3.5	4.6
9	4.3	3.2	3.0	2.4	3.0	92	1.9	3.7	74	60	3.5	4.1
10	4.4	3.3	3.0	2.4	3.0	92	1.5	19	44	69	3.3	4.7
11	3.7	3.1	3.0	2.4	3.0	92	1.3	39	12	68	3.2	4.7
12	3.7	3.3	3.0	2.5	3.0	92	1.3	67	3.0	68	23	4.7
13	3.8	3.5	3.0	2.5	3.1	91	1.3	76	3.0	67	47	4.7
14	4.0	3.5	3.0	2.8	3.2	91	1.3	76	3.0	67	54	4.7
15	4.3	3.5	3.0	3.0	3.2	90	1.3	76	2.9	67	53	4.7
16	4.4	3.5	3.0	3.0	3.2	89	1.2	76	2.8	59	51	4.9
17	4.5	3.6	3.0	3.0	3.0	89	1.6	75	2.9	27	51	4.7
18	4.5	3.7	3.0	3.0	2.6	92	3.2	75	26	9.6	51	4.7
19	4.5	3.7	3.0	3.0	2.6	95	4.3	75	58	4.5	26	4.3
20	4.7	4.1	3.0	3.0	2.6	93	4.1	75	66	3.0	2.4	4.6
21	4.7	4.3	3.0	3.0	2.7	67	4.0	75	66	3.1	2.4	4.6
22	4.3	4.3	3.0	2.9	2.7	12	3.9	74	65	3.2	2.3	3.8
23	4.7	4.6	3.0	3.0	2.7	4.5	3.9	74	65	3.2	2.3	5.5
24	4.7	4.9	3.0	3.0	2.7	4.5	3.9	58	64	3.2	2.3	7.1
25	4.5	4.9	3.0	2.9	2.7	4.5	3.9	35	64	27	2.3	7.1
26	4.5	3.6	3.0	2.8	2.7	4.6	3.7	12	65	58	2.3	10
27	3.5	2.8	3.0	2.9	2.7	4.6	3.7	7.3	65	65	2.2	12
28	3.9	2.8	3.2	3.0	2.7	4.5	3.9	4.5	43	71	2.2	12
29	4.5	2.8	3.2	3.0	---	4.5	3.9	3.7	13	73	2.0	12
30	4.6	2.8	3.3	3.0	---	4.5	4.0	3.6	1.5	73	1.9	12
31	4.8	---	3.3	3.0	---	4.5	---	3.5	---	73	53	---
TOTAL	136.0	112.6	91.4	90.6	81.1	1553.8	80.1	1114.0	1358.1	1068.9	657.0	437.1
MEAN	4.387	3.753	2.948	2.923	2.896	50.12	2.670	35.94	45.27	34.48	21.19	14.57
MAX	7.1	4.9	3.3	3.3	3.2	95	4.3	76	78	73	73	99
MIN	3.5	2.8	2.2	2.4	2.6	2.7	1.2	3.5	1.5	1.4	1.9	3.8
AC-FT	270	223	181	180	161	3080	159	2210	2690	2120	1300	867

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2002, BY WATER YEAR (WY)

	1998	1999	2000	2001	2002	2000	2001	2002	2000	2001	2002	
MEAN	8.607	4.161	8.591	19.38	32.17	59.48	68.47	251.2	162.7	83.94	71.65	53.74
MAX	22.1	5.71	17.9	37.2	46.3	80.7	131	641	369	129	120	105
(WY)	2000	2000	1999	2000	1999	1999	1998	1999	1999	1999	1999	1999
MIN	3.69	3.21	2.95	2.92	2.90	36.0	2.67	35.9	45.3	34.5	21.2	14.6
(WY)	1999	2001	2002	2002	2002	2000	2002	2002	2002	2002	2002	2002

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1998 - 2002	
ANNUAL TOTAL	20604.3		6780.7			
ANNUAL MEAN	56.45		18.58		65.02	
HIGHEST ANNUAL MEAN					135	1999
LOWEST ANNUAL MEAN					18.6	2002
HIGHEST DAILY MEAN	279	May 19	99	Sep 1	1500	May 1 1999
LOWEST DAILY MEAN	2.2	Dec 3	1.2	Apr 16	1.2	Apr 16 2002
ANNUAL SEVEN-DAY MINIMUM	2.6	Nov 29	1.3	Apr 10	1.3	Apr 10 2002
MAXIMUM PEAK FLOW			119	Aug 31	1840	Apr 30 1999
MAXIMUM PEAK STAGE			3.03	Aug 31	6.47	Apr 30 1999
ANNUAL RUNOFF (AC-FT)	40870		13450		47100	
10 PERCENT EXCEEDS	96		73		124	
50 PERCENT EXCEEDS	56		3.9		35	
90 PERCENT EXCEEDS	3.2		2.5		3.1	

06751490 NORTH FORK CACHE LA POUVRE RIVER AT LIVERMORE, CO

LOCATION.--Lat 40°47'15", long 105°15'06", in SW¹/₄SE¹/₄ sec.32, T.10 N., R.70 W., Larimer County, Hydrologic Unit 10190007, on left bank 30 ft downstream from bridge on Colorado State Highway 200, 2.0 mi west of Livermore, and 2.9 mi downstream from Stonewall Creek.

DRAINAGE AREA.--539 mi².

PERIOD OF RECORD.--October 1986 to current year. May 1929 to September 1931, May 1947 to September 1965 (published as "near Livermore", station 06751500); records are not considered equivalent. Water-quality data available, November 1986 to September 1999.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,715 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow affected by transbasin diversions, storage reservoirs, and irrigation. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data for Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	8.5	e7.5	e7.2	e7.3	e7.2	13	e6.2	4.7	3.2	2.2	13
2	7.8	8.7	e7.2	e7.2	e7.3	e7.2	13	e6.4	4.5	3.0	2.5	21
3	6.8	9.2	e6.8	e7.2	e7.3	e7.2	10	e6.0	5.3	3.3	4.3	6.6
4	7.1	9.1	e6.8	e7.2	e7.3	e8.0	9.3	e5.8	7.8	3.4	3.6	2.8
5	7.9	9.1	e7.0	e7.2	e7.3	e10	9.6	e5.6	7.0	3.0	2.8	1.3
6	6.9	9.3	e7.3	e7.2	e7.3	e12	10	e5.6	6.1	2.8	3.4	4.1
7	6.3	9.1	e7.2	e6.9	e7.3	e12	11	e5.6	6.5	2.7	3.6	4.5
8	6.4	8.5	e7.2	e6.8	e7.3	11	10	e5.6	6.3	2.4	3.4	4.5
9	7.5	8.2	e7.2	e6.8	e7.2	11	10	e5.6	6.3	2.1	2.8	6.2
10	7.2	7.9	e7.2	e6.8	e7.2	11	9.1	e5.0	6.7	2.0	2.4	3.6
11	7.3	8.2	e7.1	e6.9	e7.1	9.9	5.3	5.0	7.1	2.0	2.2	4.6
12	6.6	8.8	e7.1	e6.9	e7.2	5.7	5.0	5.1	6.3	2.0	1.9	7.1
13	5.9	8.6	e7.1	e6.9	e7.3	4.9	5.5	4.5	5.2	1.8	2.0	7.4
14	5.8	8.7	e7.1	e6.9	e7.4	5.9	7.2	4.2	5.4	1.8	1.9	5.0
15	6.7	8.7	e7.1	e7.0	e7.3	4.8	8.3	4.1	4.0	1.8	1.7	4.4
16	7.2	8.9	e7.1	e7.1	e7.3	4.7	e5.7	4.4	3.9	1.5	1.6	4.2
17	5.6	9.0	e7.0	e7.1	e7.2	4.7	e5.7	5.1	3.5	1.5	1.4	4.1
18	7.1	8.9	e7.0	e7.1	e7.1	5.4	e5.7	5.1	3.1	1.5	1.5	4.0
19	7.4	9.3	e7.0	e7.1	e7.1	5.0	e5.5	5.2	1.6	1.5	1.5	3.9
20	7.6	8.9	e7.0	e7.1	e7.1	5.7	e8.4	4.9	4.1	1.3	1.6	3.8
21	7.8	8.4	e7.0	e7.1	e7.1	5.2	e8.2	5.4	4.9	2.0	1.6	3.4
22	8.2	9.6	e7.0	e7.1	e7.1	5.2	e8.3	4.4	5.2	2.5	3.0	3.7
23	7.7	10	e7.0	e7.1	e7.1	6.1	e8.1	5.0	4.6	2.2	2.9	3.7
24	8.0	10	e7.0	e7.1	e7.1	5.9	e7.4	12	4.2	2.3	2.8	3.6
25	7.8	e10	e7.0	e7.1	e7.1	5.3	e7.0	8.6	4.2	2.0	2.8	6.1
26	8.0	e9.2	e7.0	e7.1	e7.1	5.6	e6.8	6.7	4.0	2.1	2.6	6.4
27	8.4	e8.4	e7.1	e7.1	e7.2	11	e6.6	6.2	4.3	1.8	2.7	9.2
28	7.5	e7.5	e7.2	e7.1	e7.2	12	e6.5	6.2	4.4	1.6	2.6	11
29	7.4	e7.5	e7.2	e7.3	---	12	e6.3	5.5	4.5	1.5	2.5	11
30	8.3	e7.5	e7.2	e7.3	---	12	e6.1	5.3	3.5	2.1	2.3	11
31	8.5	---	e7.2	e7.3	---	13	---	5.1	---	2.3	1.8	---
TOTAL	233.7	263.7	219.9	219.3	201.9	246.6	238.6	175.4	149.2	67.0	75.9	185.2
MEAN	7.54	8.79	7.09	7.07	7.21	7.95	7.95	5.66	4.97	2.16	2.45	6.17
MAX	15	10	7.5	7.3	7.4	13	13	12	7.8	3.4	4.3	21
MIN	5.6	7.5	6.8	6.8	7.1	4.7	5.0	4.1	1.6	1.3	1.4	1.3
AC-FT	464	523	436	435	400	489	473	348	296	133	151	367

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2002, BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	12.0	16.4	11.5	13.6	16.9	19.9	60.6	174	190	27.0	16.6	9.78				
MAX	41.0	98.8	34.3	46.2	48.2	55.5	244	904	857	133	52.5	23.6				
(WY)	1998	1998	1998	1999	1996	1990	1990	1999	1995	1995	1991	1997				
MIN	4.85	6.62	3.58	3.60	5.00	6.35	4.57	5.66	4.97	2.16	2.45	3.92				
(WY)	1989	1988	1988	1988	1995	1995	1995	2002	2002	2002	2002	2001				

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR			FOR 2002 WATER YEAR			WATER YEARS 1987 - 2002									
ANNUAL TOTAL	9305.5			2276.4												
ANNUAL MEAN	25.5			6.24			47.3									
HIGHEST ANNUAL MEAN							141									
LOWEST ANNUAL MEAN							6.24									
HIGHEST DAILY MEAN	346	May	8	21	Sep	2	2760	May	1	1999						
LOWEST DAILY MEAN	1.6	Sep	6	1.3	Jul	20	a1.3	Jul	20	2002						
ANNUAL SEVEN-DAY MINIMUM	2.8	Sep	1	1.6	Jul	14	1.6	Jul	14	2002						
MAXIMUM PEAK FLOW				27			5430									
MAXIMUM PEAK STAGE				b7.18			17.53									
ANNUAL RUNOFF (AC-FT)	18460			4520			34290									
10 PERCENT EXCEEDS	53			9.2			92									
50 PERCENT EXCEEDS	8.5			6.9			11									
90 PERCENT EXCEEDS	4.7			2.3			5.0									

e Estimated.

b Maximum gage height, 7.19 ft. Sep 1.

a Also occurred Sep 5, 2002.

06752258 CACHE LA POUVRE RIVER AT SHIELDS STREET, AT FORT COLLINS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°36'11", long 105°05'43", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.3, T.7 N., R.69 W., Larimer County, Hydrologic Unit 10190007, at Shields Street bridge, 0.8 mi downstream from Larimer-Weld Canal, and 1.0 mi northwest of Fort Collins.

PERIOD OF RECORD.--October 1979 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	ANC TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
OCT													
10...	0930	2.3	434	7.8	10.0	7.4	210	61.3	14.0	--	--	183	--
NOV													
19...	0950	2.7	375	8.2	4.5	--	180	52.3	12.5	--	--	164	--
DEC													
11...	0955	1.8	427	8.3	2.5	9.6	200	58.6	13.9	--	--	171	--
JAN													
29...	0930	17	403	8.7	.5	12.5	190	53.7	12.7	9.90	.3	142	71.1
FEB													
13...	1005	25	399	8.3	.5	12.3	190	55.5	12.9	--	--	144	--
MAR													
12...	1015	2.9	397	8.3	6.0	9.9	180	51.9	12.7	--	--	145	--
APR													
22...	1305	1.7	422	8.2	12.5	9.4	190	54.1	14.1	--	--	155	--
MAY													
30...	0950	271	85	8.3	12.5	9.6	35	10.6	2.18	--	--	34	--
JUN													
20...	0940	123	91	8.1	16.0	8.5	38	11.0	2.41	--	--	35	--
JUL													
31...	1030	7.4	110	8.3	22.5	7.8	47	13.9	3.07	3.35	.2	48	8.8
AUG													
23...	0945	39	196	8.3	18.0	7.5	85	24.8	5.49	--	--	75	--
SEP													
12...	1000	8.7	380	8.3	18.0	7.8	180	51.0	12.3	--	--	132	--

Date	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)
OCT													
10...	--	--	--	--	<.008	.168	<.04	<.06	<.02	--	--	--	--
NOV													
19...	--	--	--	--	<.008	.120	<.04	<.06	<.02	--	--	--	--
DEC													
11...	--	--	--	--	E.004	.182	<.04	<.06	<.02	--	--	--	--
JAN													
29...	5.92	.5	8.1	258	E.004	.204	<.04	<.06	<.02	1	<2	<.1	<.8
FEB													
13...	--	--	--	--	<.008	.243	<.04	<.06	<.02	--	--	--	--
MAR													
12...	--	--	--	--	<.008	.132	<.04	<.06	<.02	--	--	--	--
APR													
22...	--	--	--	--	E.007	.030	<.04	<.06	<.02	--	--	--	--
MAY													
30...	--	--	--	--	<.008	.038	<.04	<.06	<.02	--	--	--	--
JUN													
20...	--	--	--	--	<.008	.048	<.04	<.06	.02	--	--	--	--
JUL													
31...	1.58	.2	4.6	64	<.008	E.010	<.04	<.06	<.02	4	<2	<.1	<.8
AUG													
23...	--	--	--	--	<.008	<.013	<.04	<.06	<.02	--	--	--	--
SEP													
12...	--	--	--	--	<.008	.016	<.04	<.06	<.02	--	--	--	--

E Estimated laboratory analysis value.

PLATTE RIVER BASIN

06752258 CACHE LA POUUDRE RIVER AT SHIELDS STREET, AT FORT COLLINS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
OCT										
10...	2.0	M	13	--	--	--	--	--	<.1	--
NOV										
19...	.8	110	43	--	--	--	--	--	<.1	--
DEC										
11...	.9	90	20	--	--	--	--	--	<.1	--
JAN										
29...	.9	110	28	<1	22	<.01	<2.0	.7	<.1	1
FEB										
13...	1.0	80	28	--	--	--	--	--	<.1	--
MAR										
12...	1.0	100	33	--	--	--	--	--	<.1	--
APR										
22...	1.1	140	41	--	--	--	--	--	<.1	--
MAY										
30...	1.9	300	35	--	--	--	--	--	<.1	--
JUN										
20...	1.6	180	29	--	--	--	--	--	<.1	--
JUL										
31...	1.8	470	<10	M	38	<.01	<2.0	<.3	<.1	<1
AUG										
23...	1.3	130	20	--	--	--	--	--	<.1	--
SEP										
12...	.9	150	29	--	--	--	--	--	<.1	--

M Presence of material verified but not quantified.

06752260 CACHE LA POUVRE RIVER AT FORT COLLINS, CO

LOCATION.--Lat 40°35'21", long 105°04'09", in SE¹/₄NW¹/₄ sec.12, T.7 N., R.69 W., Larimer County, Hydrologic Unit 10190007, on left bank 100 ft upstream from Lincoln Street Bridge in Fort Collins.

DRAINAGE AREA.--1,127 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1975 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,940 ft above sea level, from topographic map. Prior to May 22, 1987, at site 300 ft downstream, at different datum. May 22, 1987 to Nov. 10, 1988 at site 4,300 ft upstream, at different datum. Nov. 10, 1988 to Oct. 16, 1996, at site 100 ft upstream, at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain and transbasin diversions, storage reservoirs, power developments, diversion for municipal supply, diversions upstream from station for irrigation, and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e2.1	5.9	3.0	e16	30	29	e1.0	11	166	20	15	10
2	e2.1	7.2	3.1	19	28	30	e1.0	31	276	45	23	9.3
3	e2.1	12	3.4	21	27	29	e1.0	22	416	42	25	11
4	e2.1	11	3.6	20	28	15	e1.0	13	403	72	82	7.6
5	e2.0	11	3.3	15	27	6.4	e1.0	11	329	63	46	4.6
6	e2.0	11	3.1	e17	28	5.9	e1.0	26	266	38	55	7.0
7	e2.0	13	3.0	27	26	5.7	e1.0	34	284	70	60	8.2
8	e2.0	7.1	3.0	e29	25	5.3	e1.0	53	293	68	76	14
9	e2.0	5.2	3.0	22	24	4.8	e1.0	30	319	37	37	15
10	e1.7	4.9	3.2	21	e24	4.8	2.4	16	291	14	6.2	12
11	e1.9	4.2	3.3	16	18	4.8	4.6	36	240	20	2.3	15
12	e1.5	4.6	3.2	17	17	4.4	2.8	42	203	26	7.3	10
13	e1.3	4.5	3.1	16	17	4.3	1.8	30	233	42	24	17
14	e1.5	4.7	3.1	16	e16	6.3	1.6	16	242	60	15	20
15	e1.6	4.2	3.1	20	18	4.7	3.3	16	218	27	16	8.6
16	e1.6	4.2	10	25	17	4.8	2.3	34	178	14	17	4.7
17	e1.7	4.2	28	27	18	4.5	1.4	33	123	27	9.3	4.4
18	e1.8	5.6	27	16	19	4.2	e1.0	21	114	22	10	3.1
19	e1.5	3.6	25	15	20	4.2	e1.0	83	129	21	3.7	2.3
20	e1.5	3.6	20	16	20	4.5	e1.0	136	141	11	e2.0	2.2
21	e1.5	3.6	20	18	24	4.0	e1.0	156	145	47	2.2	2.4
22	e1.6	3.4	e20	21	25	4.2	e1.0	173	121	41	26	1.9
23	e1.8	3.4	e25	20	21	4.2	e1.0	35	98	12	39	1.5
24	e1.8	3.4	19	20	28	4.2	e1.0	64	37	16	25	2.1
25	e1.8	3.2	16	20	27	4.3	e1.0	95	39	43	17	e1.0
26	e1.7	4.1	e17	e21	23	4.2	e1.0	113	27	58	14	e1.0
27	1.5	3.0	18	24	18	3.1	10	112	37	31	22	e4.5
28	1.7	3.0	16	20	20	2.5	32	145	35	67	38	6.6
29	1.7	3.0	12	19	---	2.3	34	208	23	12	10	6.5
30	1.8	3.1	13	e21	---	e1.0	14	317	19	9.2	8.5	6.7
31	1.7	---	14	31	---	e1.0	---	392	---	7.9	8.3	---
TOTAL	54.6	164.9	347.5	626	633	217.6	128.2	2504	5445	1083.1	741.8	220.2
MEAN	1.76	5.50	11.2	20.2	22.6	7.02	4.27	80.8	182	34.9	23.9	7.34
MAX	2.1	13	28	31	30	30	34	392	416	72	82	20
MIN	1.3	3.0	3.0	15	16	1.0	1.0	11	19	7.9	2.0	1.0
AC-FT	108	327	689	1240	1260	432	254	4970	10800	2150	1470	437

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2002, BY WATER YEAR (WY)

	MEAN	26.4	29.6	25.2	31.8	33.4	34.0	102	443	890	233	72.9	35.0
MAX	182	183	97.3	123	135	136	652	2720	4771	1450	301	207	
(WY)	1998	1998	1985	1984	1984	1980	1983	1980	1983	1983	1997	1997	
MIN	1.76	1.79	1.91	2.29	1.30	1.91	0.37	14.9	158	34.9	12.8	4.79	
(WY)	2002	1978	1978	1978	1987	1988	1988	1976	1989	2002	1988	1987	

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1975 - 2002

ANNUAL TOTAL	17706.6	12165.9	
ANNUAL MEAN	48.5	33.3	165
HIGHEST ANNUAL MEAN			779
LOWEST ANNUAL MEAN			33.3
HIGHEST DAILY MEAN	516	May 19	416
LOWEST DAILY MEAN	1.0	Apr 19	e1.0
ANNUAL SEVEN-DAY MINIMUM	1.6	Oct 12	e1.0
MAXIMUM PEAK FLOW			751
MAXIMUM PEAK STAGE			4.57
ANNUAL RUNOFF (AC-FT)	35120	24130	119400
10 PERCENT EXCEEDS	146	74	333
50 PERCENT EXCEEDS	17	14	26
90 PERCENT EXCEEDS	2.0	1.7	2.9

e Estimated.

a Also occurred Aug 19, Sep 4, 18-19, 1987, and many days in 1988.

PLATTE RIVER BASIN

06752260 CACHE LA POUVRE RIVER AT FORT COLLINS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1975 to current year.

REMARKS.--Additional water-quality data were collected as part of a water-quality assessment of drought conditions and are published in the "Drought Synoptic Sampling" section of this report.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	ANC TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
OCT													
10...	1125	2.0	540	7.9	12.0	9.9	250	68.4	18.1	--	--	215	--
NOV													
19...	1225	3.7	482	8.2	6.5	--	220	60.5	16.7	--	--	206	--
DEC													
10...	1515	3.1	522	8.3	4.0	11.3	240	65.2	17.7	--	--	205	--
JAN													
29...	1115	18	449	8.6	1.0	12.2	200	58.0	14.0	12.2	.4	159	73.9
FEB													
12...	1325	26	428	7.3	1.5	12.7	200	58.3	14.0	--	--	155	--
MAR													
12...	1215	4.3	544	8.5	9.0	11.0	230	64.2	17.8	--	--	173	--
APR													
22...	1515	1.0	672	8.5	18.5	11.9	280	75.1	22.0	--	--	214	--
MAY													
30...	1130	316	91	8.4	14.5	10.6	37	11.1	2.33	--	--	36	--
JUN													
20...	1120	123	100	8.1	17.0	8.0	43	12.4	2.78	--	--	38	--
JUL													
31...	1545	16	192	8.4	25.0	7.8	80	22.8	5.57	6.38	.3	75	15.9
AUG													
23...	1110	36	191	8.2	20.5	7.6	82	23.8	5.56	--	--	75	--
SEP													
12...	1525	9.5	394	8.1	20.5	8.2	180	51.0	12.6	10.6	.3	137	55.2

Date	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)
OCT													
10...	--	--	--	--	.008	.566	<.04	<.06	<.02	--	--	--	--
NOV													
19...	--	--	--	--	.014	.418	E.02	<.06	<.02	--	--	--	--
DEC													
10...	--	--	--	--	E.005	.380	<.04	<.06	<.02	--	--	--	--
JAN													
29...	8.07	.5	8.4	284	E.004	.266	<.04	<.06	<.02	<1	<2	<.1	<.8
FEB													
12...	--	--	--	--	E.004	.321	<.04	<.06	<.02	--	--	--	--
MAR													
12...	--	--	--	--	E.006	.289	<.04	<.06	<.02	--	--	--	--
APR													
22...	--	--	--	--	.015	.417	<.04	<.06	<.02	--	--	--	--
MAY													
30...	--	--	--	--	<.008	.033	<.04	<.06	<.02	--	--	--	--
JUN													
20...	--	--	--	--	<.008	.050	<.04	<.06	E.01	--	--	--	--
JUL													
31...	4.55	.2	5.8	111	<.008	.043	<.04	<.06	<.02	5	<2	<.1	<.8
AUG													
23...	--	--	--	--	<.008	.016	<.04	<.06	<.02	--	--	--	--
SEP													
12...	7.19	.4	9.7	242	E.007	.107	<.04	<.06	<.02	3	E1	<.1	<.8

E Estimated laboratory analysis value.

PLATTE RIVER BASIN

06752260 CACHE LA POUFRE RIVER AT FORT COLLINS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
OCT										
10...	2.0	110	22	--	--	--	--	--	<.1	--
NOV										
19...	1.6	280	53	--	--	--	--	--	<.1	--
DEC										
10...	1.2	150	34	--	--	--	--	--	<.1	--
JAN										
29...	.9	90	34	<1	23	<.01	<2.0	.7	<.1	<1
FEB										
12...	1.0	90	39	--	--	--	--	--	<.1	--
MAR										
12...	1.3	150	65	--	--	--	--	--	<.1	--
APR										
22...	1.8	170	55	--	--	--	--	--	<.1	--
MAY										
30...	1.9	440	27	--	--	--	--	--	<.1	--
JUN										
20...	1.6	190	30	--	--	--	--	--	<.1	--
JUL										
31...	1.6	410	<10	<1	46	<.01	<2.0	<.3	<.1	<1
AUG										
23...	1.3	200	18	--	--	--	--	--	<.1	--
SEP										
12...	1.1	210	32	<1	36	<.01	E1.2	.4	<.1	2

E Estimated laboratory analysis value.

06752270 CACHE LA POUFRE RIVER BELOW FORT COLLINS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°34'01", long 105°01'36", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.20, T.7 N., R.68 W., Larimer County, Hydrologic Unit 10190007, 1.4 mi west of Interstate 25 on Prospect Street in Fort Collins.

DRAINAGE AREA.--1,240 mi².

PERIOD OF RECORD.--January 1978 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	ANC TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	
Date		CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)
OCT														
10...	1515	11	886	8.2	14.5	12.3	400	112	30.2	--	--	218	--	
NOV														
19...	1415	15	789	8.6	8.5	--	350	93.6	28.0	--	--	222	--	
DEC														
10...	1230	14	830	8.6	4.0	11.2	360	97.1	27.6	--	--	217	--	
JAN														
28...	1325	3.2	1100	7.9	3.5	13.3	420	109	35.1	62.4	1	227	258	
FEB														
12...	1130	6.8	1020	7.5	2.0	13.3	480	128	38.5	--	--	247	--	
MAR														
12...	1415	4.3	1200	8.6	10.0	14.3	470	122	39.9	--	--	220	--	
APR														
23...	1010	3.0	1170	8.3	11.0	9.1	540	142	44.8	--	--	230	--	
MAY														
30...	1315	389	126	8.5	16.5	10.3	49	14.3	3.31	--	--	43	--	
JUN														
20...	1315	133	196	8.6	20.0	9.3	75	21.3	5.26	--	--	53	--	
JUL														
31...	1220	14	602	8.6	25.0	11.4	250	68.0	18.3	28.2	.8	128	151	
AUG														
23...	1245	46	322	8.8	21.0	8.7	130	37.9	9.79	--	--	93	--	
SEP														
12...	1400	25	530	8.3	21.0	7.6	220	61.4	15.8	--	--	127	--	

E Estimated laboratory analysis value.

06752270 CACHE LA POUDE RIVER BELOW FORT COLLINS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
OCT										
10...	3.9	130	14	--	--	--	--	--	<.1	--
NOV										
19...	2.0	240	55	--	--	--	--	--	<.1	--
DEC										
10...	2.6	140	34	--	--	--	--	--	<.1	--
JAN										
28...	1.4	170	12	<1	51	<.01	<2.0	3.9	<.1	2
FEB										
12...	1.7	170	19	--	--	--	--	--	<.2	--
MAR										
12...	1.7	250	17	--	--	--	--	--	<.1	--
APR										
23...	1.9	270	26	--	--	--	--	--	<.1	--
MAY										
30...	1.8	1000	26	--	--	--	--	--	<.1	--
JUN										
20...	1.6	250	27	--	--	--	--	--	<.1	--
JUL										
31...	2.4	210	E7	<2	34	<.01	<2.0	1.5	<.2	6
AUG										
23...	1.7	380	20	--	--	--	--	--	<.1	--
SEP										
12...	1.6	420	26	--	--	--	--	--	<.1	--

E Estimated laboratory analysis value.

06752280 CACHE LA POUVRE RIVER ABOVE BOXELDER CREEK NEAR TIMNATH, CO

LOCATION.--Lat 40 33'07", long 105 00'39", in NE¹/₄NW¹/₄ sec.28, T.7 N., R.68 W., Larimer County, Hydrologic Unit 10190007, on left bank 4,000 ft upstream from Boxelder Creek, 2.0 mi upstream from Interstate Highway 25 bridge, and 3.8 mi southeast of intersection of College Avenue and Prospect Street in Fort Collins.

DRAINAGE AREA.--1,245 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1979 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,860 ft above sea level, from topographic map. Prior to March 24, 1994, at site 1,900 ft downstream at different datum.

REMARKS.--Records good, except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain and transbasin diversions, storage reservoirs, power developments, diversion for municipal supply, diversions upstream from station for irrigation, and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	4.1	e2.0	2.2	3.0	e2.3	2.9	2.1	110	1.5	2.4	1.3
2	4.3	4.2	e2.0	e1.8	2.9	e2.2	2.5	3.0	167	2.2	2.3	1.2
3	4.1	4.5	e2.2	e2.0	2.8	e2.1	2.8	3.0	309	3.6	2.5	1.2
4	4.0	4.6	e2.5	2.1	2.7	2.1	2.6	2.0	326	13	31	1.3
5	4.0	4.4	e2.3	2.0	2.9	2.2	2.1	2.0	263	7.9	20	1.2
6	3.7	4.5	e2.2	2.2	3.1	2.2	1.5	2.1	203	4.4	17	1.1
7	3.7	5.1	e2.2	2.4	3.1	2.1	1.1	2.7	209	15	5.5	1.2
8	3.9	5.2	e2.2	2.4	2.7	2.4	1.1	3.2	225	21	19	1.3
9	3.8	2.7	e2.2	2.7	e3.1	2.3	1.4	5.5	247	4.0	3.2	4.9
10	3.4	2.4	e2.3	e2.9	e2.9	2.2	1.2	2.0	216	3.1	0.81	2.0
11	3.6	2.4	e2.2	2.7	2.6	2.2	1.2	2.3	178	2.0	0.25	1.8
12	3.2	2.6	e2.1	2.5	2.6	2.0	1.3	3.1	137	1.7	0.03	1.1
13	2.8	2.6	e2.0	2.5	2.5	2.3	1.2	2.6	153	2.3	0.18	3.0
14	2.9	2.4	e2.0	e2.3	2.6	3.0	1.2	2.4	167	8.3	0.28	3.1
15	3.1	2.5	1.9	2.2	2.4	2.4	1.3	2.0	139	3.9	0.18	2.7
16	3.1	2.6	1.9	2.1	2.5	2.3	1.3	2.5	104	2.8	0.97	2.0
17	3.3	2.4	1.7	2.7	2.6	2.4	1.4	3.4	58	1.6	0.56	1.6
18	3.4	2.9	1.5	2.7	2.6	2.7	1.4	3.1	42	1.8	0.25	1.4
19	3.2	e2.9	1.5	2.8	2.5	2.5	1.2	16	53	1.7	0.17	1.5
20	3.2	e2.6	1.6	2.9	2.8	2.9	2.6	57	65	1.5	0.12	1.4
21	3.2	e2.6	2.0	2.7	2.8	2.9	2.7	78	76	9.8	0.12	1.4
22	3.5	e2.6	2.0	2.8	2.6	2.9	2.2	100	54	20	1.5	1.2
23	3.5	e2.6	2.1	2.7	2.8	3.0	2.0	8.6	42	3.9	10	1.2
24	3.1	e2.6	2.2	2.9	2.7	3.2	2.0	61	9.8	3.0	2.0	1.4
25	3.0	e2.6	2.1	2.9	e2.3	3.2	1.7	40	4.6	8.0	1.4	1.5
26	3.1	e2.6	2.2	3.0	e2.2	3.2	2.3	52	3.9	20	1.5	1.5
27	3.5	e2.3	2.1	3.2	e2.1	3.0	2.6	49	3.1	9.5	1.7	1.4
28	3.5	e2.0	2.0	3.3	e2.2	3.0	2.3	76	2.9	13	9.6	1.5
29	3.5	e2.0	1.9	3.0	---	3.1	3.8	121	2.8	13	1.7	1.4
30	3.9	e2.1	1.6	3.1	---	3.0	2.9	210	2.2	3.5	1.4	1.1
31	3.8	---	1.8	3.1	---	3.0	---	311	---	2.8	1.2	---
TOTAL	108.4	91.6	62.5	80.8	74.6	80.3	57.8	1228.6	3572.3	209.8	138.82	59.8
MEAN	3.50	3.05	2.02	2.61	2.66	2.59	1.93	39.6	119	6.77	4.48	1.99
MAX	4.3	5.2	2.5	3.3	3.1	3.2	3.8	311	326	21	31	11
MIN	2.8	2.0	1.5	1.8	2.1	2.0	1.1	2.0	2.2	1.5	0.03	1.1
AC-FT	215	182	124	160	148	159	115	2440	7090	416	275	119

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2002, BY WATER YEAR (WY)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	
MEAN	21.8	32.2	26.9	27.8	27.1	29.6	106	429	853	196	49.6	29.7												
MAX	162	179	114	139	156	159	633	2729	4430	1288	278	182												
(WY)	1998	1998	1998	1984	1984	1980	1980	1980	1983	1983	1997	1997												
MIN	3.50	3.05	2.02	2.61	2.66	2.59	1.93	8.66	85.8	5.94	4.27	1.99												
(WY)	2002	2002	2002	2002	2002	2002	2002	1982	1989	1987	1987	2002												

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1980 - 2002

ANNUAL TOTAL	8665.3	5762.22		
ANNUAL MEAN	23.7	15.8		
HIGHEST ANNUAL MEAN			700	1983
LOWEST ANNUAL MEAN			15.8	2002
HIGHEST DAILY MEAN	382	May 19	326	Jun 4
LOWEST DAILY MEAN	1.1	Apr 9	0.03	Aug 12
ANNUAL SEVEN-DAY MINIMUM	1.7	Dec 14	0.34	Aug 15
MAXIMUM PEAK FLOW			573	May 31
MAXIMUM PEAK STAGE			5.73	May 31
ANNUAL RUNOFF (AC-FT)	17190	11430		
10 PERCENT EXCEEDS	74	20		279
50 PERCENT EXCEEDS	4.3	2.6		11
90 PERCENT EXCEEDS	2.2	1.4		3.8

e Estimated.
a From slope-area measurement of peak flow.
b From highwater marks.

06752280 CACHE LA POUFRE RIVER ABOVE BOXELDER CREEK NEAR TIMNATH, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1979 to current year.

REMARKS.--Additional water-quality data were collected as part of a water-quality assessment of drought conditions and are published in the "Drought Synoptic Sampling" section of this report.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	ALKA-LINITY WAT.DIS FET LAB (MG/L CACO3) (29801)	ANC UNFLTRD LAB (MG/L AS CACO3) (90410)
OCT													
11...	0815	3.5	1540	8.3	7.0	7.8	760	199	63.5	--	--	--	224
NOV													
20...	1020	2.7	1780	8.3	2.5	--	930	238	81.6	--	--	--	253
DEC													
10...	1105	2.4	1900	8.3	1.0	11.8	950	246	82.6	--	--	--	245
JAN													
29...	1330	2.8	1770	8.4	1.5	12.2	850	219	73.6	81.4	1	--	162
FEB													
12...	1005	2.9	1710	8.3	.5	11.5	870	224	74.7	--	--	--	239
MAR													
13...	0945	2.5	1780	8.4	7.0	10.8	830	215	72.0	--	--	--	209
APR													
23...	1125	2.0	1750	8.3	13.5	10.1	840	216	74.4	--	--	--	215
MAY													
30...	1510	278	165	8.5	18.5	8.3	63	18.0	4.43	--	--	--	53
JUN													
20...	1500	56	286	8.5	22.0	9.3	120	31.8	8.81	--	--	--	61
JUL													
31...	1345	2.4	1100	8.3	27.5	9.6	490	128	41.8	50.0	1	144	146
AUG													
23...	1440	7.4	650	8.8	25.0	12.1	280	75.0	22.4	--	--	--	139
SEP													
12...	1250	3.8	853	7.9	21.0	7.6	400	106	33.2	39.2	.9	167	165

Date	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, DIS-SOLVED (MG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)
OCT													
11...	--	--	--	--	--	.036	1.54	E.03	.10	.08	--	--	--
NOV													
20...	--	--	--	--	--	.036	1.76	.06	E.06	.06	--	--	--
DEC													
10...	--	--	--	--	--	.071	2.08	.07	.08	.08	--	--	--
JAN													
29...	782	37.3	1.1	11.0	1510	.022	1.72	.08	<.06	<.02	<1	<2	<.1
FEB													
12...	--	--	--	--	--	.015	1.88	.06	<.06	<.02	--	--	--
MAR													
13...	--	--	--	--	--	.018	.893	.06	<.06	<.02	--	--	--
APR													
23...	--	--	--	--	--	.022	.346	E.02	<.06	<.02	--	--	--
MAY													
30...	--	--	--	--	--	E.005	.174	<.04	E.05	.03	--	--	--
JUN													
20...	--	--	--	--	--	E.005	.211	E.04	E.05	.07	--	--	--
JUL													
31...	432	15.8	.7	8.2	839	.013	.217	<.04	.07	.07	3	E1	<.1
AUG													
23...	--	--	--	--	--	.010	.392	<.04	.11	.10	--	--	--
SEP													
12...	299	15.8	.6	9.6	659	.032	.636	<.04	.10	.08	1	<2	E.1

E Estimated laboratory analysis value.

PLATTE RIVER BASIN

06752280 CACHE LA POUFRE RIVER ABOVE BOXELDER CREEK NEAR TIMNATH, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
OCT											
11...	--	6.6	70	17	--	--	--	--	--	<.2	--
NOV											
20...	--	2.4	130	15	--	--	--	--	--	<.4	--
DEC											
10...	--	5.3	90	E9	--	--	--	--	--	<.1	--
JAN											
29...	<.8	2.7	170	<10	<1	56	<.01	<2.0	9.7	<.1	4
FEB											
12...	--	3.2	110	E8	--	--	--	--	--	<.1	--
MAR											
13...	--	2.8	160	23	--	--	--	--	--	<.1	--
APR											
23...	--	3.2	270	31	--	--	--	--	--	<.1	--
MAY											
30...	--	1.7	1610	23	--	--	--	--	--	<.1	--
JUN											
20...	--	1.6	300	31	--	--	--	--	--	<.1	--
JUL											
31...	<.8	5.6	270	E6	<1	89	<.01	<2.0	2.7	<.2	2
AUG											
23...	--	1.8	240	24	--	--	--	--	--	<.1	--
SEP											
12...	<.8	2.2	250	12	<1	77	<.01	E1.5	3.0	<.1	3

E Estimated laboratory analysis value.

06753990 LONETREE CREEK NEAR GREELEY, CO

LOCATION.--Lat 40°26'33", long 104°35'18", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.31, T.6 N., R.64 W., Weld County, Hydrologic Unit 10190008, on right bank 50 ft downstream from bridge on Weld County Road 62 $\frac{1}{2}$, 5.5 mi east of Greeley.

DRAINAGE AREA.--567 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1993 to September 1995, April 2001 to current year.

REVISED RECORDS.--WDR CO-95-1: 1994.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,630 ft above sea level, from topographic map.

REMARKS.--Records poor. Natural flow effected by diversions upstream to New Poudre Irrigation Company.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	1.6	e1.8	e1.5	e1.7	e1.4	0.99	e0.13	1.9	e0.66	e0.36	0.00
2	4.2	1.6	1.8	e1.5	e1.8	e1.4	1.2	e0.33	2.4	e0.58	e0.15	0.00
3	4.6	1.5	1.9	e1.5	e1.8	e1.4	1.1	e0.38	e19	e0.83	e0.19	0.00
4	4.0	1.4	1.9	e1.4	e1.8	e1.4	1.1	e0.35	e13	e1.0	e0.18	0.00
5	4.8	1.3	1.8	e1.4	e1.8	e1.4	1.1	e0.04	e4.5	e0.72	e0.12	0.00
6	5.0	1.4	1.8	e1.5	e1.8	e1.4	1.1	e0.31	e3.4	e167	e0.11	0.00
7	5.1	1.5	1.8	e1.5	e1.8	e1.4	1.4	e0.46	e1.9	e5.5	e0.12	0.00
8	7.0	1.5	e1.9	e1.5	e1.8	e1.4	1.4	e0.00	e0.40	e1.3	e0.00	0.00
9	14	1.4	e1.9	e1.5	e1.7	e1.4	0.99	0.00	e0.62	e1.2	e0.00	0.00
10	8.4	1.4	e1.9	e1.5	e1.6	e1.3	1.1	0.18	e1.5	e1.1	e0.06	0.00
11	5.1	1.4	e1.9	e1.6	e1.6	1.3	0.81	0.44	e1.3	e0.98	e0.00	0.00
12	3.8	1.5	e1.8	e1.7	e1.5	1.2	0.78	0.01	e1.0	e0.81	e0.00	0.00
13	3.3	1.6	e1.8	e1.7	e1.4	1.1	0.76	0.02	e1.7	e0.77	e0.16	0.00
14	2.8	1.5	e1.8	e1.7	e1.3	e1.1	0.74	0.14	e1.3	e0.66	e0.70	0.00
15	2.5	1.5	e1.7	e1.7	e1.3	e1.0	0.47	0.12	e0.90	e0.35	e0.09	0.00
16	2.3	1.5	e1.7	e1.6	e1.2	0.98	0.58	0.07	e0.65	e0.29	e0.01	0.00
17	1.9	1.6	e1.7	e1.6	e1.2	0.94	0.66	0.01	e0.55	e0.10	e0.01	0.00
18	1.8	1.6	e1.7	e1.6	e1.2	0.86	e0.88	0.11	e0.83	e0.05	e0.00	0.00
19	1.8	1.6	e1.7	e1.6	e1.2	0.83	e0.98	0.12	e8.8	e0.27	e0.00	0.00
20	1.9	1.7	e1.7	e1.6	e1.2	0.80	e0.98	0.17	e29	e0.22	e0.03	0.00
21	2.1	1.8	e1.8	e1.6	e1.2	e0.80	e0.51	0.20	e2.2	e0.02	e0.00	0.00
22	1.8	1.8	e1.7	e1.6	e1.2	e0.82	e0.52	0.55	e1.3	e0.00	e0.06	0.00
23	2.0	1.8	e1.6	e1.6	e1.2	0.84	e0.50	0.73	e1.2	e0.04	e0.15	0.00
24	1.5	1.7	e1.6	e1.5	e1.3	0.88	e0.38	2.1	e1.1	e0.03	e0.16	0.00
25	1.5	1.8	e1.5	e1.5	e1.3	e0.98	e0.25	0.37	e0.50	e0.25	e0.08	0.00
26	1.7	e1.8	e1.5	e1.5	e1.3	0.97	e0.26	0.11	e0.72	e0.11	e0.16	0.00
27	1.9	e1.8	e1.5	e1.6	e1.3	1.0	e0.26	0.11	e0.09	e0.50	e0.00	0.00
28	1.8	e1.8	e1.5	e1.6	e1.4	1.0	e0.14	0.29	e0.21	e1.0	e0.00	0.00
29	1.5	e1.8	e1.5	e1.6	---	0.94	e0.14	0.35	e0.44	e0.89	e0.17	0.00
30	1.6	1.8	e1.5	e1.6	---	0.93	e0.11	0.54	e0.83	1.2	0.00	0.00
31	1.6	---	e1.5	e1.7	---	0.94	---	0.41	---	e1.1	0.00	---
TOTAL	107.5	48.0	53.2	48.6	40.9	34.11	22.19	9.15	103.24	189.53	3.07	0.00
MEAN	3.468	1.600	1.716	1.568	1.461	1.100	0.740	0.295	3.441	6.114	0.099	0.000
MAX	14	1.8	1.9	1.7	1.8	1.4	1.4	2.1	29	167	0.70	0.00
MIN	1.5	1.3	1.5	1.4	1.2	0.80	0.11	0.00	0.09	0.00	0.00	0.00
AC-FT	213	95	106	96	81	68	44	18	205	376	6.1	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2002, BY WATER YEAR (WY)

	1993	1994	1995	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
MEAN	6.514	6.872	5.324	4.584	4.039	4.130	3.684	17.49	24.04	23.40	6.051	11.49	
MAX	11.8	9.97	8.10	6.79	6.52	7.27	5.63	35.0	52.2	70.7	12.7	28.7	
(WY)	1994	1994	1994	1994	1994	1994	1993	1993	1995	1995	1995	1995	
MIN	3.47	1.60	1.72	1.57	1.46	1.10	0.74	0.30	3.44	4.37	0.099	0.000	
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2002	1994	2002	2002	

SUMMARY STATISTICS

FOR 2002 WATER YEAR

WATER YEARS 1993 - 2002

ANNUAL TOTAL	659.49		
ANNUAL MEAN	1.807	9.773	
HIGHEST ANNUAL MEAN		17.9	1995
LOWEST ANNUAL MEAN		1.81	2002
HIGHEST DAILY MEAN	e167 Jul 6	250	May 29 1993
LOWEST DAILY MEAN	e,a0.00 May 8	a0.00	May 8 2002
ANNUAL SEVEN-DAY MINIMUM	0.00 Aug 30	0.00	Aug 30 2002
MAXIMUM PEAK FLOW	Not determined	b429	May 28 1993
MAXIMUM PEAK STAGE	10.54 Jul 6	10.85	May 28 1993
ANNUAL RUNOFF (AC-FT)	1310	7080	
10 PERCENT EXCEEDS	1.9	20	
50 PERCENT EXCEEDS	1.2	4.6	
90 PERCENT EXCEEDS	0.00	0.45	

e Estimated.

a No flow many days in 2002.

b On basis of indirect measurement of peak flow.

PLATTE RIVER BASIN

06753990 LONETREE CREEK NEAR GREELEY, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1993 to September 1995, February 2001 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS) (00453)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS) (39086)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	SILICA, DIS-SOLVED (MG/L) (00955)	SODIUM, DIS-SOLVED (MG/L) (00930)	SULFATE DIS-SOLVED (MG/L) (00945)	
OCT														
09...	1055	14	1410	8.5	12.4	9.4	180	152	--	--	--	--	577	
17...	0950	1.8	2550	8.4	7.4	13.9	--	--	--	--	--	--	--	
NOV														
06...	1050	1.3	2620	8.3	10.3	10.9	394	323	--	--	--	--	1150	
DEC														
05...	1230	1.8	2660	8.4	4.5	17.4	393	338	--	--	--	--	1180	
JAN														
10...	1055	1.5	2560	8.5	2.7	15.6	323	325	--	--	--	--	1190	
FEB														
04...	1115	1.9	2650	8.3	.3	14.7	404	331	--	--	--	--	1170	
MAR														
05...	1050	1.4	2670	8.4	.1	12.9	366	324	--	--	--	--	1210	
19...	1125	.91	2670	8.5	9.5	17.2	361	313	--	--	--	--	--	
APR														
03...	1005	1.1	2760	8.5	7.5	18.8	361	318	--	--	--	--	1250	
12...	0945	.80	2570	8.4	9.4	12.7	--	--	--	--	--	--	--	
23...	1000	.50	2600	8.5	10.8	17.5	--	--	--	--	--	--	--	
MAY														
21...	1040	.23	1910	8.5	19.7	14.8	257	225	--	--	--	--	748	
30...	1110	.60	1720	8.5	23.8	14.3	--	--	--	--	--	--	--	
JUN														
03...	1030	1.3	836	8.8	22.8	11.3	116	116	--	--	--	--	260	
13...	1005	1.7	875	8.9	19.4	12.4	--	--	--	--	--	--	--	
18...	1010	.83	1350	8.4	20.6	14.0	--	--	--	--	--	--	--	
25...	1245	.50	1910	8.3	29.0	13.3	--	--	--	--	--	--	--	
JUL														
10...	1200	1.1	1960	8.8	30.0	17.4	213	225	--	--	--	--	781	
17...	1115	.10	1690	8.4	27.0	16.1	--	--	--	--	--	--	--	
30...	1100	1.2	1570	8.4	25.4	15.4	--	--	--	--	--	--	--	
AUG														
06...	0940	.11	1830	8.4	22.0	13.2	336	280	204	62.2	25.7	125	642	
22...	1020	.06	1890	8.4	21.8	16.8	--	--	--	--	--	--	--	
Date		CHLO-RIDE, DIS-SOLVED (MG/L) (00940)	IRON, DIS-SOLVED (UG/L) (01046)	MANGA-NESE, DIS-SOLVED (AS MN) (01056)	NITRO-GEN, NITRITE SOLVED (AS N) (00613)	NITRO-GEN, NO2+NO3 SOLVED (MG/L) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L) (00625)	PHOS-PHORUS TOTAL (MG/L) (00665)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L) (00681)	CARBON, INOR-GANIC, PARTIC-ULATE TOTAL (MG/L) (00688)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L) (00689)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L) (00694)
OCT														
09...	30.4	--	--	.082	3.91	E.03	1.8	.43	E.01	6.8	.2	15.9	16.0	
17...	--	--	--	.062	12.0	<.04	.95	.077	.04	--	--	--	--	
NOV														
06...	74.3	--	--	.109	12.6	<.04	1.0	.021	<.02	8.1	--	--	.6	
DEC														
05...	70.5	--	--	.073	11.4	E.03	1.1	.033	E.01	9.9	--	--	.5	
JAN														
10...	68.5	--	--	.109	11.1	.07	1.1	.027	<.02	8.8	--	--	.7	
FEB														
04...	67.0	--	--	.106	11.4	.06	1.1	.033	<.02	9.0	--	--	.7	
MAR														
05...	70.2	--	--	.100	9.55	.12	1.2	.065	E.01	11.0	<.1	.9	.9	
19...	--	--	--	.111	9.04	E.03	1.1	.051	<.02	--	--	--	--	
APR														
03...	70.8	--	--	.116	8.38	.04	1.2	.054	.02	10.6	<.1	.9	.9	
12...	--	--	--	.114	7.53	E.04	1.2	.070	.02	--	--	--	--	
23...	--	--	--	.106	8.89	<.04	.95	.029	<.02	--	--	--	--	
MAY														
21...	49.1	--	--	.111	12.1	<.04	.79	.048	<.02	4.9	<.1	.6	.6	
30...	--	--	--	.071	9.10	E.02	1.6	.155	<.02	--	--	--	--	
JUN														
03...	20.0	--	--	.076	2.17	<.04	1.7	.45	.19	6.8	<.1	4.8	4.8	
13...	--	--	--	.067	2.13	<.04	2.0	.38	.12	--	--	--	--	
18...	--	--	--	.145	6.11	.07	1.3	.26	.17	--	--	--	--	
25...	--	--	--	.357	9.61	<.21	1.9	.198	<.02	--	--	--	--	
JUL														
10...	52.1	--	--	.112	4.94	<.04	2.9	.44	.12	9.0	<.1	5.9	5.9	
17...	--	--	--	.087	9.61	E.03	1.9	.20	.10	--	--	--	--	
30...	--	--	--	.076	7.26	<.04	1.4	.21	.08	--	--	--	--	
AUG														
06...	45.9	<10	10.2	.146	12.4	E.02	.77	.071	.04	5.3	<.1	.4	.4	
22...	--	--	--	.122	12.0	<.04	.72	.037	E.01	--	--	--	--	

E Estimated laboratory analysis value.

06753990 LONETREE CREEK NEAR GREELEY, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NITRO- GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	ACETO- CHLOR, WATER FLTRD (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	DEETHYL ZINE, WATER, DISS, REC, (UG/L) (04040)	ATRA- ZINE, WATER, DISS, REC, (UG/L) (39632)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL- ATE, WATER, DISS, REC, (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC, (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)
	OCT												
09...	2.76	<.004	<.002	E.032	.037	<.050	<.010	<.002	<.041	<.020	<.005	<.018	<.003
17...	--	<.004	<.002	E.134	.123	<.050	<.010	<.002	<.041	<.020	<.005	<.018	<.003
NOV													
06...	.12	<.004	<.002	E.099	.099	<.050	<.010	<.002	<.041	<.020	<.005	<.018	<.003
DEC													
05...	.07	<.004	<.002	E.090	.082	<.050	<.010	<.002	<.041	<.020	<.005	<.018	<.003
JAN													
10...	.08	<.006	<.004	E.062	.074	<.050	<.010	<.002	<.041	<.020	<.005	<.018	<.003
FEB													
04...	.08	<.006	<.004	E.128	.110	<.050	<.010	<.002	<.041	<.020	<.005	<.018	<.003
MAR													
05...	.13	<.006	<.004	E.094	.094	<.050	<.010	<.002	<.041	<.020	<.005	<.018	<.003
19...	--	<.006	<.004	E.072	.124	<.050	<.010	<.002	<.041	<.020	<.005	<.018	<.003
APR													
03...	.13	<.006	<.004	E.066	.101	<.050	<.010	<.002	<.041	<.020	<.005	<.018	.005
12...	--	<.006	<.004	E.058	.104	<.050	<.010	<.002	<.041	<.020	<.005	<.018	<.003
23...	--	<.006	<.004	E.066	.130	<.050	<.010	<.002	<.041	<.020	<.005	<.018	.005
MAY													
21...	.10	<.006	<.004	E.112	.134	<.050	<.010	<.002	<.041	<.020	<.005	<.018	.005
30...	--	<.006	<.004	E.146	.164	<.050	<.010	<.002	<.041	<.020	<.005	<.018	.004
JUN													
03...	.84	<.006	<.004	E.019	.036	<.050	<.010	<.002	<.041	<.020	<.005	<.018	E.003
13...	--	<.006	<.004	E.028	.056	<.050	<.010	<.002	E.007	<.020	<.005	<.018	<.003
18...	--	<.006	<.004	E.080	.095	<.050	<.010	<.002	<.041	<.020	<.005	<.018	.013
25...	--	<.006	<.004	E.128	.188	<.050	<.010	<.002	<.041	<.020	<.005	<.018	.006
JUL													
10...	1.08	<.006	<.004	E.074	.250	<.050	<.010	<.002	<.041	<.020	<.005	<.018	.013
17...	--	<.006	<.004	E.104	.087	<.050	<.010	<.002	<.041	<.020	<.005	<.018	.004
30...	--	<.006	<.004	E.101	.115	<.050	<.010	<.002	<.041	<.020	<.005	E.007	.004
AUG													
06...	.07	<.006	<.004	E.103	.092	<.050	<.010	<.002	<.041	<.020	<.005	<.018	.005
22...	--	<.006	<.004	E.100	.107	<.050	<.010	<.002	<.041	<.020	<.005	<.018	<.003

Date	P, P' DDE DISSOLV (UG/L) (34653)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)
	OCT												
09...	<.003	<.005	<.005	<.002	<.02	E.001	<.009	<.005	<.003	<.005	<.004	<.035	<.027
17...	<.003	<.005	<.005	<.002	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
NOV													
06...	E.001	<.005	<.005	<.002	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
DEC													
05...	<.003	<.005	<.005	<.002	<.02	.004	<.009	<.005	<.003	<.005	<.004	<.035	<.027
JAN													
10...	<.003	<.005	<.005	<.006	<.02	.012	<.009	<.005	<.003	<.005	<.004	<.035	<.027
FEB													
04...	<.003	<.005	<.005	<.006	<.02	.016	<.009	<.005	<.003	<.005	<.004	<.035	<.027
MAR													
05...	<.003	<.005	<.005	<.006	<.02	.024	<.009	<.005	<.003	<.005	<.004	<.035	<.027
19...	<.003	<.005	<.005	<.006	<.02	.015	<.009	<.005	<.003	<.005	<.004	<.035	<.027
APR													
03...	<.003	<.005	<.005	<.006	<.02	.004	<.009	<.005	<.003	<.005	<.004	<.035	<.027
12...	<.003	<.005	<.005	<.006	<.02	E.001	<.009	<.005	<.003	<.005	<.004	<.035	<.027
23...	<.003	<.005	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
MAY													
21...	<.003	<.005	<.005	<.006	<.02	.004	<.009	<.005	<.003	<.005	<.004	<.035	<.027
30...	<.005	.005	<.005	<.006	<.02	.087	<.009	<.005	<.003	<.005	<.004	.061	<.027
JUN													
03...	<.003	.011	<.005	<.006	<.02	.171	<.009	<.005	<.003	<.005	<.004	.052	<.027
13...	<.003	.019	<.005	<.006	<.02	.008	<.009	<.005	<.003	<.005	<.004	.144	<.027
18...	<.003	<.005	<.005	<.006	<.02	.020	<.009	<.005	<.003	<.005	<.004	<.035	<.027
25...	<.003	.024	<.005	<.006	<.02	E.021	<.009	<.005	<.003	<.005	<.004	.093	<.027
JUL													
10...	<.003	<.005	<.005	<.006	<.02	.011	<.009	<.005	<.003	<.005	<.004	<.035	<.027
17...	<.003	<.005	<.005	<.006	<.02	.010	<.009	<.005	<.003	<.005	<.004	<.035	<.027
30...	<.003	<.005	<.005	<.006	<.02	<.004	<.009	<.005	<.003	<.005	<.004	<.035	<.027
AUG													
06...	E.002	<.005	<.005	<.006	<.02	.004	<.009	<.005	<.003	<.005	<.004	<.035	<.027
22...	<.003	<.005	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027

E Estimated laboratory analysis value.

PLATTE RIVER BASIN

06753990 LONETREE CREEK NEAR GREELEY, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METHO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)
	Date	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METHO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)
OCT													
09...	<.006	E.008	<.006	<.002	<.007	<.007	<.002	.015	<.006	<.011	.04	<.004	<.010
17...	<.006	E.006	<.006	<.002	<.007	<.007	<.002	<.010	<.006	<.011	.04	<.004	<.010
NOV													
06...	<.006	E.011	<.006	<.002	<.007	<.007	<.002	<.010	<.006	<.011	.04	<.004	<.010
DEC													
05...	<.006	.024	<.006	<.002	<.007	<.007	<.002	<.010	<.006	<.011	.04	<.004	<.010
JAN													
10...	<.006	E.011	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.03	<.004	<.010
FEB													
04...	<.006	.014	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.05	<.004	<.010
MAR													
05...	<.006	E.009	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.04	<.004	<.010
19...	<.006	E.008	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.04	<.004	<.010
APR													
03...	<.006	E.010	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.06	<.004	<.010
12...	<.006	E.009	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.05	<.004	<.010
23...	<.006	E.009	<.006	<.002	<.007	<.010	<.004	E.021	<.006	<.011	.05	<.004	<.010
MAY													
21...	<.006	E.003	<.006	<.002	<.007	<.010	<.004	1.10	<.006	<.011	.03	<.004	<.010
30...	<.006	E.009	<.006	<.002	<.007	<.010	<.004	.266	<.006	<.011	.05	<.004	<.010
JUN													
03...	<.006	.087	<.006	<.002	<.007	<.010	<.004	.130	<.006	<.011	.03	<.004	<.010
13...	<.006	.068	<.006	<.002	<.007	<.010	<.004	.278	<.006	<.011	.03	<.004	<.010
18...	<.006	.087	<.006	<.002	<.007	<.010	<.004	.302	<.006	<.011	.03	<.004	<.010
25...	<.006	.117	<.006	<.002	<.007	<.010	<.004	.055	<.006	<.011	.04	<.004	<.010
JUL													
10...	<.006	.156	<.006	<.002	<.007	<.010	<.004	.050	<.006	<.011	.04	<.004	<.010
17...	<.006	.130	<.006	<.002	<.007	<.010	<.004	.070	<.006	<.011	.04	<.004	<.010
30...	<.006	.030	<.006	<.002	<.007	<.010	<.004	.158	<.006	<.011	.04	<.004	<.010
AUG													
06...	<.006	.027	<.006	<.002	<.007	<.010	<.004	.053	<.006	<.011	.06	<.004	<.010
22...	<.020	E.009	<.006	<.002	<.007	<.010	<.004	E.011	<.006	<.011	.04	<.004	<.010
Date	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	ALA- CHLOR ESA WAT FLT 0.7 U GF, REC (UG/L) (50009)	ACETO- CHLOR ESA FLTRD 0.7 UM GF REC (UG/L) (61029)	ACETO- CHLOR OA FLTRD 0.7 UM GF REC (UG/L) (61030)	ALA- CHLOR OA FLTRD 0.7 UM GF REC (UG/L) (61031)
OCT													
09...	<.011	<.02	<.011	E.01	<.034	<.02	<.005	<.002	<.009	--	--	--	--
17...	<.011	<.02	<.011	<.02	<.034	<.02	<.005	<.002	<.009	--	--	--	--
NOV													
06...	<.011	<.02	<.011	<.02	<.034	<.02	<.005	<.002	<.009	2.20	<.05	<.05	.06
DEC													
05...	<.011	<.02	<.011	<.02	<.034	<.02	<.005	<.002	<.009	2.66	<.05	<.05	.09
JAN													
10...	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009	<.05	<.05	<.05	<.05
FEB													
04...	<.011	<.02	<.005	M	<.034	<.02	<.005	<.002	<.009	2.02	<.05	<.05	.06
MAR													
05...	<.011	--	<.005	<.02	<.034	<.02	<.005	<.002	<.009	2.07	<.05	<.05	.07
19...	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009	--	--	--	--
APR													
03...	<.011	<.02	<.005	E.01	<.034	<.02	<.005	<.002	<.009	2.88	<.05	<.05	.08
12...	<.011	<.02	<.010	<.02	<.034	<.02	<.005	<.002	<.009	--	--	--	--
23...	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009	1.42	<.05	<.05	<.05
MAY													
21...	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009	2.23	<.05	<.05	<.05
30...	<.011	<.02	.006	<.02	<.034	--	<.005	<.002	<.009	--	--	--	--
JUN													
03...	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009	.39	<.05	<.05	<.05
13...	<.011	<.02	<.005	E.01	<.034	<.02	<.005	<.002	<.009	.21	<.05	<.05	<.05
18...	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009	.61	<.05	<.05	<.05
25...	<.011	<.02	.006	<.02	<.034	<.02	<.005	<.002	<.009	1.19	<.05	<.05	<.05
JUL													
10...	<.011	<.02	<.005	E.01	<.034	<.02	<.005	<.002	<.009	1.27	<.05	<.05	<.05
17...	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009	.09	<.05	<.05	<.05
30...	<.011	.23	<.005	E.01	<.034	<.02	<.005	<.002	<.009	--	--	--	--
AUG													
06...	<.011	.20	.005	<.02	<.034	<.02	<.005	<.002	<.009	1.17	<.05	<.05	<.05
22...	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009	1.17	<.05	<.05	<.05

E Estimated laboratory analysis value.

M Presence of material verified but not quantified.

PLATTE RIVER BASIN

06753990 LONETREE CREEK NEAR GREELEY, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	METOLA- CHLOR ESA FLTRD 0.7 UM GF REC (UG/L) (61043)	METOLA- CHLOR OA FLTRD 0.7 UM GF REC (UG/L) (61044)	DIMETH- ENAMID, ESA, WAT FLT (UG/L) (61951)	FLUFEN- ACET, ESA, WAT FLT (UG/L) (61952)	DIMETH- ENAMID OA, WATER FLT, REC (UG/L) (62482)	FLUFE- NACET OA, WATER FLT, REC (UG/L) (62483)
OCT						
09...	--	--	--	--	--	--
17...	--	--	--	--	--	--
NOV						
06...	1.75	.49	<.05	<.05	<.05	<.05
DEC						
05...	2.54	.64	<.05	<.05	<.05	<.05
JAN						
10...	<.05	<.05	<.05	<.05	<.05	<.05
FEB						
04...	2.00	.51	<.05	<.05	<.05	<.05
MAR						
05...	1.89	.70	<.05	<.05	<.05	<.05
19...	--	--	--	--	--	--
APR						
03...	2.41	.78	<.05	<.05	<.05	<.05
12...	--	--	--	--	--	--
23...	1.28	.40	<.05	<.05	<.05	<.05
MAY						
21...	1.96	.39	<.05	<.05	<.05	<.05
30...	--	--	--	--	--	--
JUN						
03...	.24	.06	<.05	<.05	<.05	<.05
13...	.18	.07	<.05	<.05	<.05	<.05
18...	.59	.13	<.05	<.05	<.05	<.05
25...	1.36	.44	<.05	<.05	<.05	<.05
JUL						
10...	1.43	.39	<.05	<.05	<.05	<.05
17...	.23	.07	<.05	<.05	<.05	<.05
30...	--	--	--	--	--	--
AUG						
06...	1.36	.42	<.05	<.05	<.05	<.05
22...	1.16	.25	<.05	<.05	<.05	<.05

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT					
09...	1055	14	138	5.2	--
17...	0950	1.8	69	.34	--
NOV					
06...	1050	1.3	12	.04	--
DEC					
05...	1230	1.8	13	.07	--
JAN					
10...	1055	1.5	15	.06	96
FEB					
04...	1115	1.9	31	.16	81
MAR					
05...	1050	1.4	17	.06	87
19...	1125	.91	67	.16	94
APR					
03...	1005	1.1	29	.09	97
12...	0945	.80	61	.13	96
23...	1000	.50	52	.07	98
MAY					
21...	1040	.23	7.0	.0	99
30...	1110	.60	40	.06	93
JUN					
03...	1030	1.3	32	.11	96
13...	1005	1.7	38	.17	99
18...	1010	.83	12	.03	99
25...	1245	.50	41	.06	99
JUL					
10...	1200	1.1	33	.10	99
17...	1115	.10	21	.01	91
30...	1100	1.2	23	.07	92
AUG					
06...	0940	.11	104	.03	92
22...	1020	.06	90	.01	95

06754000 SOUTH PLATTE RIVER NEAR KERSEY, CO

LOCATION.--Lat 40°24'44", long 104°33'46", in NW¹/₄SW¹/₄ sec.9, T.5 N., R.64W., Weld County, Hydrologic Unit 10190003, on downstream side of bridge on State Highway 37, 1.9 mi north of railroad in Kersey, and 2.5 mi downstream from Cache la Poudre River.

DRAINAGE AREA.--9,598 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1901 to December 1903, March 1905 to current year. Monthly discharge only for some periods, published in WSP 1310. Published as "at Kersey" 1901-03. Statistical summary computed for 1976 to current year.

REVISED RECORDS.--WSP 1310: 1902, 1906, 1935(M). WSP 1730: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 4,575.77 ft above sea level. See WSP 1710 or 1730 for history of changes prior to July 3, 1935.

REMARKS.--Records fair except for period Nov. 25 to Jan. 29, and estimated daily discharges, which are poor. Natural flow of stream affected by transmountain and transbasin diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation of about 888,000 acres, and return flow from irrigated areas.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	350	787	726	597	633	663	484	72	154	73	89	70
2	331	807	750	590	622	663	435	80	148	72	84	68
3	300	846	759	597	625	644	391	74	191	108	79	78
4	295	778	759	590	629	690	367	66	304	e210	70	78
5	319	732	742	590	623	759	e290	57	527	e150	75	70
6	359	732	742	598	607	798	272	62	366	599	82	63
7	411	718	734	597	584	697	249	66	262	236	95	75
8	433	700	701	605	593	739	247	70	200	201	116	73
9	448	780	701	597	574	738	247	68	e170	e160	83	76
10	450	755	692	583	538	792	237	83	e130	136	80	97
11	466	742	684	583	579	851	223	88	109	89	79	111
12	484	708	684	590	578	815	183	111	115	88	83	e130
13	481	689	684	590	616	756	157	126	95	82	92	e160
14	485	670	684	597	619	765	140	122	83	81	91	621
15	486	663	676	590	620	816	130	111	80	77	88	554
16	545	659	684	582	634	809	121	118	128	74	91	334
17	563	666	692	582	669	755	112	150	87	74	89	183
18	604	671	701	590	698	717	109	152	87	77	93	137
19	648	675	701	583	642	706	104	139	75	75	90	133
20	628	700	684	583	619	695	102	119	120	74	90	146
21	709	738	684	583	599	651	107	108	86	66	86	167
22	684	708	668	597	594	611	101	103	79	66	86	125
23	668	711	660	590	587	580	98	94	76	66	85	121
24	725	760	645	590	590	579	88	137	79	64	96	114
25	750	776	645	605	606	590	100	1530	80	64	84	111
26	776	759	645	613	616	597	90	950	75	66	81	118
27	779	726	645	609	644	560	94	434	77	76	79	120
28	808	726	637	629	649	537	86	291	79	78	79	171
29	755	726	629	621	---	524	75	224	79	84	78	202
30	769	726	621	e640	---	521	71	196	76	94	79	183
31	792	---	613	e640	---	501	---	164	---	96	79	---
TOTAL	17301	21834	21272	18531	17187	21119	5510	6165	4217	3556	2651	4689
MEAN	558	728	686	598	614	681	184	199	141	115	85.5	156
MAX	808	846	759	640	698	851	484	1530	527	599	116	621
MIN	295	659	613	582	538	501	71	57	75	64	70	63
AC-FT	34320	43310	42190	36760	34090	41890	10930	12230	8360	7050	5260	9300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2002, BY WATER YEAR (WY)

MEAN	882	944	856	836	849	920	1062	2401	3152	1005	816	784
MAX	3388	2585	1337	1434	1641	1852	3894	13060	14520	5784	2783	2079
(WY)	1985	1985	1985	1984	1984	1983	1983	1980	1983	1983	1984	1984
MIN	415	488	568	503	540	473	144	199	113	115	85.5	156
(WY)	1978	1978	1982	1982	1978	1982	1982	2002	1977	2002	2002	2002

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1976 - 2002

ANNUAL TOTAL	249196	144032	
ANNUAL MEAN	683	395	a1209
HIGHEST ANNUAL MEAN			3631
LOWEST ANNUAL MEAN			395
HIGHEST DAILY MEAN	5000	May 6	1530
LOWEST DAILY MEAN	131	Jun 30	57
ANNUAL SEVEN-DAY MINIMUM	146	Jun 27	66
MAXIMUM PEAK FLOW			2070
MAXIMUM PEAK STAGE		5.47	May 25
ANNUAL RUNOFF (AC-FT)	494300	285700	f11.00
10 PERCENT EXCEEDS	1010	738	2000
50 PERCENT EXCEEDS	682	434	762
90 PERCENT EXCEEDS	270	77	291

e Estimated.

a Average discharge for 71 years (water years 1902-03, 1906-74), 777 ft³/s; 562900 acre-ft/yr, prior to completion of Chatfield Dam.

b Maximum daily discharge for period of record, 31000 ft³/s, Jun 7, 1921.

c Minimum daily discharge for period of record, 28 ft³/s, Apr 30, 1955.

d Maximum discharge and stage for period of record, 31500 ft³/s, May 8, 1973, gage height, 11.73 ft.

f Maximum gage height for statistical period, 11.50 ft, May 1, 1999.

PLATTE RIVER BASIN

06754000 SOUTH PLATTE RIVER NEAR KERSEY, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	NITROGEN, NITRITE SOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 SOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA SOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	ORTHO-PHOSPHATE, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, INORGANIC, PARTICULATE TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC, PARTICULATE TOTAL (MG/L AS C) (00689)	CARBON, INORGANIC TOTAL (MG/L AS C) (00694)
OCT 04...	73.9	--	--	.184	6.18	.79	1.6	.68	.55	4.4	<.1	1.1	1.1
NOV 07...	76.1	--	--	.053	6.88	.26	1.2	.93	.86	4.5	--	--	1.3
DEC 06...	82.0	--	--	.084	7.21	.65	1.6	.99	.90	5.0	--	--	1.6
JAN 07...	86.8	--	--	.207	8.67	.76	1.9	1.02	.90	4.9	--	--	2.0
FEB 05...	87.4	--	--	.163	7.81	.75	2.0	1.18	.95	5.3	--	--	2.8
MAR 06...	189	--	--	.140	6.76	.71	2.3	1.34	.84	5.0	--	--	6.5
APR 04...	83.8	--	--	.080	6.88	.79	1.9	.88	.78	4.2	<.1	2.0	2.0
18...	--	--	--	.095	7.18	.05	.94	.36	.27	--	--	--	--
MAY 06...	115	--	--	.185	7.31	2.83	4.8	1.72	1.39	4.5	<.1	1.7	1.7
13...	--	--	--	.198	6.34	1.47	3.9	1.22	.93	--	--	--	--
JUN 04...	57.0	--	--	.113	4.13	.94	2.9	.97	.56	5.6	<.1	7.5	7.5
14...	--	--	--	.179	6.38	1.65	2.9	1.08	.98	--	--	--	--
25...	--	--	--	.247	7.31	1.49	3.2	1.05	.74	--	--	--	--
JUL 08...	77.2	--	--	.132	5.88	1.29	2.7	.85	.66	4.5	<.1	3.2	3.3
18...	--	--	--	.220	7.36	1.55	3.4	1.26	.94	--	--	--	--
AUG 08...	80.2	<10	177	.212	6.03	1.81	3.3	.79	.54	6.9	.2	4.0	4.2
19...	--	--	--	.256	7.61	2.40	3.4	.77	.70	--	--	--	--
SEP 03...	86.2	20	167	.288	7.36	.90	2.7	.81	.55	4.3	<.1	1.2	1.2
03...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	NITROGEN, PARATICULTE WAT FLT SUSP (MG/L AS N) (49570)	ACETOCHLOR, WATER FLTRD REC (UG/L AS N) (49260)	ALACHLOR, WATER, DISS, REC (UG/L) (46342)	DEETHYL ATRAZINE, WATER, DISS, REC (UG/L) (04040)	METHYL AZINPHOS WAT FLT GF, REC (UG/L) (39632)	BENFLURALIN WAT FLD GF, REC (UG/L) (82673)	BUTYLATE, WATER, DISS, REC (UG/L) (04028)	CARBARYL WATER FLTRD GF, REC (UG/L) (82680)	CARBON FURAN WATER FLTRD GF, REC (UG/L) (82674)	CHLORPYRIFOS DIS-SOLVED (UG/L) (38933)	CYANAZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD GF, REC (UG/L) (82682)	
OCT 04...	.15	<.004	<.002	E.047	.089	<.050	<.010	<.002	<.041	<.020	<.005	<.018	<.003
NOV 07...	.19	<.004	<.002	E.035	.054	<.050	<.010	<.002	E.008	<.020	<.005	<.018	<.003
DEC 06...	.24	<.004	<.002	E.036	.036	<.050	<.010	<.002	<.041	<.020	<.005	<.018	<.003
JAN 07...	.34	<.004	<.002	E.030	.036	<.050	<.010	<.002	<.041	<.020	<.005	<.018	<.003
FEB 05...	.38	<.006	<.004	E.040	.043	<.050	<.010	<.002	E.014	<.020	<.005	<.018	<.003
MAR 06...	.76	<.006	<.004	E.021	.030	<.050	<.010	<.002	E.059	<.020	<.005	<.018	<.003
APR 04...	.37	<.006	<.004	E.027	.077	<.050	<.010	<.002	<.041	<.020	<.005	<.018	.005
18...	--	.024	<.004	E.049	.157	<.050	<.010	<.002	E.008	<.020	<.005	<.018	.004
MAY 06...	.32	<.006	<.004	E.099	.123	<.050	<.010	<.002	<.041	<.020	<.005	<.018	E.002
13...	--	.009	.055	E.077	.123	<.050	<.010	<.002	E.004	<.020	<.005	<.018	.003
JUN 04...	.95	<.006	<.010	E.058	.126	<.050	<.010	<.002	E.134	<.020	.017	<.025	.011
14...	--	<.006	<.004	E.097	.115	<.050	<.010	<.002	E.006	<.020	<.005	<.018	E.003
25...	--	<.006	<.004	E.119	.118	<.050	<.010	<.002	E.013	<.020	<.005	<.018	.006
JUL 08...	.45	<.006	<.004	E.083	.108	<.050	<.010	<.002	E.004	<.020	<.005	<.018	.014
18...	--	<.006	<.004	E.098	.096	<.050	<.010	<.002	E.038	<.020	<.005	<.018	.003
AUG 08...	.68	<.006	<.004	E.088	.091	<.050	<.010	<.002	E.070	<.020	<.005	<.018	.004
19...	--	<.006	<.004	E.084	.089	<.050	<.010	<.002	<.041	<.020	<.005	<.018	<.003
SEP 03...	.24	<.006	<.004	E.095	.087	<.050	<.010	<.002	<.041	<.020	<.005	<.018	<.003
03...	--	--	--	--	--	--	--	--	<.1	--	<.5	--	--

E Estimated laboratory analysis value.

06754000 SOUTH PLATTE RIVER NEAR KERSEY, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	P,P' DDE (UG/L) (34653)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	2,6-DI- ETHYL- ANILINE WAT FLT 0.7 U (UG/L) (82660)	DISUL- FOTON WATER FLTRD 0.7 U (UG/L) (82677)	EPTC WATER FLTRD 0.7 U (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U (UG/L) (82672)	FONOFOS WATER RECI (UG/L) (04095)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)
OCT 04...	<.003	E.003	<.005	<.002	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
NOV 07...	<.003	.009	<.005	<.002	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
DEC 06...	<.003	.006	<.005	<.002	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
JAN 07...	<.003	.007	<.005	<.002	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
FEB 05...	<.003	<.005	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
MAR 06...	<.003	<.005	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
APR 04...	<.003	E.004	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
18...	<.003	.007	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
MAY 06...	<.003	<.005	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
13...	<.003	.009	<.005	<.006	<.02	.011	<.009	<.005	<.003	<.005	<.004	<.035	<.027
JUN 04...	E.002	.259	<.005	<.006	<.02	.163	.012	<.005	<.003	<.005	<.004	.431	.042
14...	<.003	E.005	<.005	<.006	<.02	.026	<.009	<.005	<.003	<.005	<.004	.061	<.027
25...	<.003	<.005	<.005	<.006	<.02	E.040	<.009	<.005	<.003	<.005	<.004	<.035	<.027
JUL 08...	<.003	.006	<.005	<.006	<.02	.007	<.009	<.005	<.003	<.005	<.004	<.035	<.027
18...	<.003	E.003	.006	<.006	<.02	.004	E.004	<.005	<.003	<.005	<.004	<.035	<.027
AUG 08...	<.003	.041	<.005	<.006	<.02	<.005	<.009	<.005	<.003	<.005	<.004	<.035	E.008
19...	<.003	E.004	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
SEP 03...	<.003	<.005	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027
03...	--	<.5	--	--	--	--	--	--	--	--	--	--	--

Date	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U (UG/L) (82684)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)
OCT 04...	<.006	E.011	<.006	<.002	<.007	<.007	<.002	<.010	<.006	<.011	.04	<.004	<.010
NOV 07...	<.006	E.009	<.006	<.002	<.007	<.007	<.002	<.010	<.006	<.011	.04	<.004	<.010
DEC 06...	<.006	E.007	<.006	<.002	<.007	<.007	<.002	<.010	<.006	<.011	.03	<.004	<.010
JAN 07...	<.006	E.006	<.006	<.002	<.007	<.007	<.002	<.010	<.006	<.011	.03	<.004	<.010
FEB 05...	<.006	E.013	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	<.01	<.004	<.010
MAR 06...	<.006	E.012	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.03	<.004	<.010
APR 04...	<.006	E.011	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.05	<.004	<.010
18...	<.006	.013	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.05	<.004	<.010
MAY 06...	<.006	E.007	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.04	<.004	<.010
13...	<.006	.014	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.04	<.004	<.010
JUN 04...	<.006	.768	<.006	<.002	<.007	<.010	<.004	.430	<.006	E.006	.07	<.004	<.010
14...	<.006	.062	<.006	<.002	<.007	<.010	<.004	.147	<.006	<.011	.04	<.004	<.010
25...	<.006	.134	<.006	<.002	<.007	<.010	<.004	.032	<.006	<.011	.04	<.004	<.010
JUL 08...	<.006	.045	<.006	<.002	<.007	<.010	<.004	.041	<.006	<.011	.04	<.004	<.010
18...	<.006	.101	<.006	<.002	<.007	<.010	<.004	.294	<.006	<.011	.04	<.004	<.010
AUG 08...	.019	.064	<.006	<.002	<.007	<.010	<.004	.036	<.006	<.011	.06	<.004	<.010
19...	.016	.021	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.04	<.004	<.010
SEP 03...	<.006	.018	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.05	<.004	<.010
03...	--	M	--	--	--	--	--	--	--	--	<.5	--	--

E Estimated laboratory analysis value.
M Presence of material verified but not quantified.

PLATTE RIVER BASIN

06754000 SOUTH PLATTE RIVER NEAR KERSEY, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	PRO-PANIL WATER FLTRD 0.7 U (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U (UG/L) (82661)	1,4-DI-CHLORO-BENZENE DISSOLV (UG/L) (34572)	1METHYL-NAPH-THALENE WATER, FLTRD REC (UG/L) (62054)	FLUOR-ANTHENE DISSOLV (UG/L) (34377)	26DIMETHYL-NAPH-THALENE WATER, FLTRD REC (UG/L) (62055)
OCT 04...	<.011	<.02	<.011	E.01	<.034	<.02	<.005	<.002	<.009	--	--	--	--
NOV 07...	<.021	<.02	E.005	E.02	<.034	<.02	<.005	<.002	<.009	--	--	--	--
DEC 06...	<.011	<.02	<.011	E.02	<.034	<.02	<.005	<.002	<.009	--	--	--	--
JAN 07...	<.011	<.02	<.011	<.02	<.034	<.02	<.005	<.002	<.009	--	--	--	--
FEB 05...	<.011	<.02	<.005	.02	<.034	<.02	<.005	<.002	<.009	--	--	--	--
MAR 06...	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009	--	--	--	--
APR 04...	<.011	<.04	<.005	.02	<.034	<.02	<.005	<.002	<.009	--	--	--	--
18...	<.011	<.02	.009	E.01	<.034	<.02	<.005	<.002	<.009	--	--	--	--
MAY 06...	<.011	<.02	<.006	E.01	<.034	<.02	<.005	<.002	<.009	--	--	--	--
13...	<.011	<.02	<.005	E.01	<.034	<.02	<.005	<.002	<.009	--	--	--	--
JUN 04...	<.011	<.02	.011	<.02	<.034	<.02	<.005	<.002	E.007	--	--	--	--
14...	<.011	<.02	E.005	E.01	<.034	<.02	<.005	<.002	<.009	--	--	--	--
25...	<.011	<.02	.006	<.02	<.034	<.02	<.005	<.002	<.009	--	--	--	--
JUL 08...	<.011	<.02	.005	E.02	<.034	<.02	<.005	<.002	<.009	--	--	--	--
18...	<.011	E.02	<.005	E.01	<.034	<.02	<.005	<.002	E.002	--	--	--	--
AUG 08...	<.011	<.03	.005	E.02	<.034	<.02	<.005	<.002	<.009	<.5	<.5	<.5	<.5
19...	<.011	<.02	<.005	E.01	<.034	<.02	<.005	<.002	<.009	--	--	--	--
SEP 03...	<.011	<.02	.006	E.01	<.034	<.02	<.005	<.002	<.009	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	<.5	<.5	<.5	<.5
Date	HHMCP-BENZO-PYRAN, WATER, FLTRD REC (UG/L) (62075)	2METHYL-NAPH-THALENE WATER, FLTRD REC (UG/L) (62056)	INDOLE, WATER, FLTRD REC (UG/L) (62076)	3-BETA-COPRO-STANOL, WATER, FLTRD REC (UG/L) (62057)	ISOBOR-NEOL, WATER, FLTRD REC (UG/L) (62077)	3METHYL 1(H)-INDOLE, WATER, FLTRD REC (UG/L) (62058)	ISO-PHORONE DISSOLV (UG/L) (34409)	3-TERT-BHA, WATER, FLTRD REC (UG/L) (62059)	ISO-PROPYL BENZENE WATER, FLTRD REC (UG/L) (62078)	4-CUMYL PHENOL, WATER, FLTRD REC (UG/L) (62060)	ISO-QUIN-OLINE, WATER, FLTRD REC (UG/L) (62079)	4-OCTYL PHENOL, WATER, FLTRD REC (UG/L) (62061)	MENTHOL WATER, FLTRD REC (UG/L) (62080)
OCT 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 07...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 07...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 05...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 08...	<.5	<.5	<.5	<2	<.5	<1	<.5	<5	<.5	<1	<.5	<1	<.5
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	M	<.5	<.5	<2	<.5	<1	<.5	<5	<.5	<1	<.5	<1	<.5

E Estimated laboratory analysis value.

M Presence of material verified but not quantified.

06754000 SOUTH PLATTE RIVER NEAR KERSEY, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	4-TERT-OCTYL-PHENOL, WATER, FLTRD REC (UG/L) (62062)	METAL-AXYL WATER, FLTRD REC (UG/L) (50359)	5METHYL-1HBENZO-TRIAZLE WATER, FLTRD REC (UG/L) (62063)	METHYL-SALICY-LATE, WATER, FLTRD REC (UG/L) (62081)	ACETO-PHENONE WATER, FLTRD REC (UG/L) (62064)	DEET, WATER, FLTRD REC (UG/L) (62082)	AHT-NAPH-THALENE WATER, FLTRD REC (UG/L) (62065)	NAPHTH-ALENE DISSOLV (UG/L) (34443)	ANTHRA-CENE DISSOLV (UG/L) (34221)	NONYL-PHENOL, DIETHOX WATER, FLTRD REC (UG/L) (62083)	ANTHRA-QUINONE WATER, FLTRD REC (UG/L) (62066)	DI-ETHOXY-OCTYL-PHENOL WAT REC (UG/L) (61705)	BENZO-A-PYRENE DISSOLV (UG/L) (34248)
OCT 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 07...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 07...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 05...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 08...	<1	M	<2	<.5	<.5	E.1	M	<.5	M	E3	E.1	M	<.5
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	<1	<.5	<2	<.5	<.5	M	M	<.5	<.5	<5	<.5	<1	<.5

Date	MONO-ETHOXY-OCTYL-PHENOL WAT REC (UG/L) (61706)	BENZO-PHENONE WATER, FLTRD REC (UG/L) (62067)	PARA-CRESOL, WATER, FLTRD REC (UG/L) (62084)	BETA-SITOS-TEROL, WATER, FLTRD REC (UG/L) (62068)	PARA-NONYL-PHENOL, WATER, FLTRD REC (UG/L) (62085)	STIGMA-STANOL, WATER, FLTRD REC (UG/L) (62086)	PENTA-CHLORO-PHENOL DISSOLV (UG/L) (34459)	BISPHE-NOL A, WATER, FLTRD REC (UG/L) (62069)	PHENAN-THREN EDISSOLV (UG/L) (34462)	BRO-MACIL, WATER, DISS, REC (UG/L) (04029)	PHENOL WATER, FILTRD (UG/L) (34466)	BROMO-FORM DISSOLV (UG/L) (34288)	PYRENE DISSOLV (UG/L) (34470)
OCT 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 07...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 07...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 05...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 08...	E1	M	<1	<2	<5	<2	<2	<1	M	<.5	<.5	<.5	<.5
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	M	<.5	<1	<2	<5	<2	<2	<1	<.5	<.5	<.5	<.5	<.5

E Estimated laboratory analysis value.
M Presence of material verified but not quantified.

PLATTE RIVER BASIN

06754000 SOUTH PLATTE RIVER NEAR KERSEY, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	CAF- FEINE, WATER FLTRD REC (UG/L) (50305)	TETRA- CHLORO- ETHY- LENE DISSOLV (UG/L) (34476)	CAMPHOR WATER, FLTERD REC (UG/L) (62070)	TRIS(2- BUTOXE- PHOS- PHATE, WATER, FLTERD REC (UG/L) (62093)	CARBA- ZOLE, WATER, FLTERD REC (UG/L) (62071)	FYROL CEF, WATER, FLTERD REC (UG/L) (62087)	CHOLE- TEROL, WATER, FLTERD REC (UG/L) (62072)	TRIBUTL PHOS- PHATE, WATER, FLTERD REC (UG/L) (62089)	COT- ININE, WATER, FLTERD REC (UG/L) (62005)	TRICLO- SAN, WATER, FLTERD REC (UG/L) (62090)	D-LIMO- NENE, WATER, FLTERD REC (UG/L) (62073)	TRI- ETHYL CITRATE WATER, FLTERD REC (UG/L) (62091)	DICHLOR VOS, WATER, FLTRD REC (UG/L) (38775)
OCT 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 07...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 07...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 05...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 08...	E.2	<.5	E.1	<.5	<.5	E.1	<2	E.1	<1	<1	<.5	<.5	<1.00
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	M	<.5	<.5	E.2	<.5	M	M	<.5	<1	<1	<.5	<.5	<1.00

Date	TRIPHNL PHOS- PHATE, WATER, FLTERD REC (UG/L) (62092)	FYROL PCF, WATER, FLTERD REC (UG/L) (62088)
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OCT 04...	--	--
NOV 07...	--	--
DEC 06...	--	--
JAN 07...	--	--
FEB 05...	--	--
MAR 06...	--	--
APR 04...	--	--
18...	--	--
MAY 06...	--	--
13...	--	--
JUN 04...	--	--
14...	--	--
25...	--	--
JUL 08...	--	--
18...	--	--
AUG 08...	E.1	E.1
19...	--	--
SEP 03...	--	--
03...	M	M

E Estimated laboratory analysis value.
M Presence of material verified but not quantified.

PLATTE RIVER BASIN

06754000 SOUTH PLATTE RIVER NEAR KERSEY, CO--Continued
(National Water-Quality Assessment Program station)

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	1350	1310	1330	1720	1660	1700
2	---	---	---	---	---	---	1370	1340	1350	1690	1610	1660
3	---	---	---	---	---	---	1390	1350	1370	1710	1630	1670
4	---	---	---	---	---	---	1480	1360	1400	1760	1700	1730
5	---	---	---	---	---	---	1430	1360	1410	1780	1720	1760
6	---	---	---	---	---	---	1440	1400	1420	1800	1730	1780
7	---	---	---	1460	1340	1380	1460	1410	1430	1820	1740	1790
8	---	---	---	1370	1270	1320	1490	1440	1460	1790	1730	1760
9	---	---	---	1320	1240	1280	1490	1450	1470	1790	1680	1740
10	---	---	---	1250	1190	1210	1530	1480	1510	1750	1660	1710
11	---	---	---	1350	1190	1290	1560	1520	1540	1730	1670	1700
12	---	---	---	1350	1240	1270	1580	1480	1540	1680	1560	1610
13	---	---	---	1310	1240	1280	1510	1480	1500	1600	1530	1570
14	---	---	---	1320	1270	1290	1520	1480	1510	1620	1540	1570
15	---	---	---	1300	1230	1270	1520	1450	1480	1640	1610	1620
16	---	---	---	1390	1300	1360	1510	1470	1490	1630	1540	1610
17	---	---	---	1350	1300	1320	1540	1460	1510	1540	1380	1480
18	---	---	---	1360	1290	1310	1550	1480	1520	1550	1460	1520
19	---	---	---	1320	1270	1290	1570	1480	1530	1590	1550	1570
20	---	---	---	1300	1260	1290	1550	1510	1530	1620	1590	1610
21	---	---	---	1340	1300	1330	1560	1440	1530	1630	1590	1610
22	---	---	---	1350	1330	1340	1570	1430	1520	1660	1590	1610
23	---	---	---	1370	1330	1350	1580	1480	1530	1640	1600	1620
24	---	---	---	1350	1330	1340	1600	1540	1580	1640	1030	1290
25	---	---	---	1370	1330	1350	1600	1530	1570	1190	393	658
26	---	---	---	1360	1320	1340	1610	1490	1540	---	---	---
27	---	---	---	1330	1310	1320	1630	1570	1610	---	---	---
28	---	---	---	1340	1320	1330	1670	1620	1630	---	---	---
29	---	---	---	1340	1310	1330	1700	1640	1670	---	---	---
30	---	---	---	1320	1240	1270	1720	1670	1690	---	---	---
31	---	---	---	1310	1260	1290	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	1720	1310	1510	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	1680	1530	1640	1690	1610	1660	1720	1670	1700
2	---	---	---	1660	1620	1640	1730	1670	1700	1720	1690	1700
3	---	---	---	1690	974	1510	1690	1660	1680	1700	1640	1670
4	---	---	---	1460	1050	1340	1690	1640	1670	1700	1640	1670
5	1250	1000	1080	1540	1380	1490	1700	1630	1660	1680	1610	1650
6	1280	1080	1200	1540	448	909	1670	1570	1620	1690	1580	1660
7	1360	1280	1310	1510	1270	1440	1620	1540	1570	1670	1640	1650
8	1440	1350	1390	1560	1490	1520	1570	1310	1490	1670	1580	1630
9	1450	1420	1430	1570	1530	1550	1590	1500	1570	1680	1560	1610
10	1470	1420	1450	1570	1500	1530	1590	1510	1570	1640	1490	1560
11	1460	1430	1450	1670	1570	1640	1590	1550	1580	1620	1510	1550
12	1450	1420	1420	1680	1630	1650	1610	1520	1590	1600	952	1540
13	1540	1450	1480	1700	1660	1680	1630	1580	1600	1490	1300	1440
14	1540	1470	1510	1720	1590	1670	1630	1590	1600	1450	779	984
15	1560	1500	1530	1650	1530	1600	1630	1600	1620	1330	1040	1170
16	1500	1070	1370	1700	1540	1630	1650	1610	1630	1470	1310	1410
17	1480	1380	1450	1750	1490	1660	1680	1630	1650	1560	1470	1520
18	1560	1480	1520	1700	1630	1660	1690	1650	1670	1590	1520	1560
19	1660	1550	1600	1690	1630	1670	1710	1670	1690	1620	1560	1590
20	1960	1020	1420	1720	1660	1690	1710	1690	1700	1630	1500	1590
21	1640	1560	1610	1740	1710	1730	1700	1680	1690	1570	1450	1540
22	1650	1610	1630	1730	1650	1700	1710	1680	1700	1610	1510	1580
23	1730	1640	1680	1700	1640	1670	1710	1690	1700	1620	1540	1590
24	1730	1640	1680	1640	1610	1630	1700	1660	1690	1630	1590	1600
25	1680	1640	1660	1630	1600	1620	1690	1680	1680	1640	1550	1600
26	1700	1570	1660	1610	1580	1600	1690	1630	1670	1600	1550	1590
27	1680	1500	1630	1610	1570	1590	1710	1640	1680	1620	1570	1600
28	1680	1580	1650	1650	1580	1620	1720	1600	1680	1590	1490	1560
29	1680	1510	1640	1690	1650	1680	1710	1620	1680	1540	1460	1500
30	1680	1650	1670	1690	1440	1600	1720	1670	1690	1730	1450	1530
31	---	---	---	1610	1490	1560	1730	1630	1690	---	---	---
MONTH	---	---	---	1750	448	1580	1730	1310	1650	1730	779	1550

PLATTE RIVER BASIN

06754000 SOUTH PLATTE RIVER NEAR KERSEY, CO--Continued
(National Water-Quality Assessment Program station)

TEMPERATURE WATER (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	17.0	9.1	12.7	14.1	8.3	11.0
2	---	---	---	---	---	---	10.4	5.7	7.3	20.5	8.1	13.1
3	---	---	---	---	---	---	11.6	3.9	7.7	21.8	8.7	14.8
4	---	---	---	---	---	---	15.2	5.7	12.0	21.8	9.5	14.9
5	---	---	---	---	---	---	17.1	7.4	12.2	23.5	10.1	15.9
6	---	---	---	---	---	---	15.9	9.5	12.7	23.9	10.1	15.9
7	---	---	---	11.2	5.1	8.0	16.4	10.1	13.2	19.0	10.9	13.7
8	---	---	---	8.3	1.4	5.1	14.5	10.0	11.5	20.7	9.3	13.6
9	---	---	---	6.7	-0.1	3.2	18.6	8.4	13.0	20.6	7.0	12.9
10	---	---	---	9.3	3.1	6.1	15.2	10.9	13.0	17.3	8.5	12.5
11	---	---	---	11.8	6.4	8.9	18.3	9.9	13.7	18.6	11.3	13.4
12	---	---	---	11.4	7.5	9.5	20.3	10.0	14.6	18.1	10.4	13.1
13	---	---	---	12.4	7.4	9.7	21.2	10.2	15.5	23.0	9.0	15.5
14	---	---	---	9.0	6.0	7.4	16.6	10.6	13.9	20.1	11.2	14.7
15	---	---	---	8.9	3.9	6.1	20.0	10.7	14.9	21.8	11.5	15.4
16	---	---	---	9.4	4.0	6.6	15.9	10.3	12.8	13.9	11.4	12.4
17	---	---	---	10.3	4.6	7.4	19.5	7.6	13.0	19.1	11.0	13.8
18	---	---	---	9.8	5.5	7.5	20.0	8.3	12.7	22.5	10.9	16.2
19	---	---	---	11.7	4.8	8.1	13.7	6.3	9.5	23.5	11.8	17.1
20	---	---	---	13.5	6.2	9.5	8.5	6.5	7.5	18.2	12.2	14.7
21	---	---	---	8.7	4.5	6.6	17.2	5.8	10.8	19.7	11.5	15.2
22	---	---	---	11.7	3.4	7.4	19.8	6.2	12.7	20.7	9.6	14.6
23	---	---	---	13.3	6.7	9.6	21.5	8.1	14.3	20.0	9.3	14.0
24	---	---	---	9.7	4.5	7.1	19.5	7.1	12.8	14.7	10.7	12.3
25	---	---	---	6.3	2.9	4.7	16.4	6.9	11.0	16.9	10.9	13.6
26	---	---	---	12.4	3.7	7.7	18.2	8.1	12.3	21.7	13.9	17.5
27	---	---	---	14.0	6.9	10.4	18.3	10.2	13.2	24.3	15.1	19.2
28	---	---	---	16.0	7.4	11.5	21.0	8.1	13.7	24.1	14.6	19.1
29	---	---	---	14.9	7.8	11.3	21.9	9.1	14.8	22.2	14.6	18.5
30	---	---	---	13.6	7.7	10.7	23.0	9.8	15.6	27.1	14.3	20.4
31	---	---	---	15.6	7.9	11.4	---	---	---	26.4	15.7	20.3
MONTH	---	---	---	---	---	---	23.0	3.9	12.5	27.1	7.0	15.1

PLATTE RIVER BASIN

06754000 SOUTH PLATTE RIVER NEAR KERSEY, CO--Continued
(National Water-Quality Assessment Program station)

TEMPERATURE WATER (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN									
1	23.3	15.0	18.7	27.5	16.4	21.9	24.2	15.9	19.7	23.0	15.9	19.4
2	27.0	14.4	19.9	26.5	17.3	21.5	25.9	14.8	19.7	24.7	14.0	18.6
3	23.1	12.3	17.4	25.3	16.4	19.8	24.4	17.1	20.1	24.9	14.4	19.0
4	20.4	14.5	16.7	27.3	17.9	22.0	28.4	16.3	21.5	25.8	15.5	20.0
5	23.6	14.9	19.0	28.4	18.5	23.0	28.1	17.8	21.6	25.2	14.8	19.5
6	26.4	16.8	21.3	25.4	18.5	21.6	27.9	16.8	21.4	24.6	14.8	19.2
7	26.8	17.1	21.6	28.4	19.1	23.4	28.1	16.9	21.6	25.6	15.3	19.7
8	26.2	15.8	20.6	29.4	18.6	23.5	28.1	18.2	22.0	23.9	15.7	19.4
9	25.6	15.6	20.5	28.6	18.8	23.2	27.0	16.2	21.1	20.8	16.6	18.3
10	23.8	14.4	19.1	28.2	19.0	22.8	27.6	16.4	21.4	21.3	16.1	17.7
11	25.6	14.5	19.5	28.6	17.3	22.4	27.9	16.2	21.7	22.9	14.9	18.3
12	26.4	14.6	20.0	29.3	16.9	22.5	24.0	16.2	19.1	22.7	16.6	19.0
13	25.6	14.8	19.1	28.4	16.8	22.0	24.8	14.3	19.1	21.4	16.6	18.6
14	26.1	13.3	19.1	28.0	16.8	22.1	26.4	14.3	20.2	21.9	17.1	19.2
15	24.4	15.3	19.2	27.3	17.4	22.2	25.6	15.0	20.0	22.7	16.4	19.3
16	27.7	16.1	20.9	26.8	16.9	22.1	27.0	15.5	20.7	22.6	15.5	18.8
17	28.6	15.6	21.7	27.1	16.8	22.0	23.2	14.4	18.4	19.9	15.0	17.3
18	28.0	16.4	21.6	28.6	17.1	22.3	21.9	13.9	17.2	19.5	14.7	16.6
19	26.7	15.7	20.1	29.3	17.0	22.7	24.7	13.2	18.4	19.5	12.7	15.9
20	24.9	12.8	18.9	29.6	17.9	22.8	23.1	16.2	19.3	21.7	12.8	17.0
21	25.9	16.8	20.6	29.1	17.8	21.8	25.4	15.9	19.1	20.0	13.3	16.1
22	27.3	17.2	21.2	27.4	16.4	20.9	25.6	14.9	19.3	20.9	13.5	16.5
23	28.2	16.0	21.7	27.8	16.8	21.3	25.2	14.7	19.4	19.5	12.5	15.6
24	28.9	16.6	22.3	29.5	16.7	22.4	25.7	15.9	20.0	20.9	12.1	16.0
25	26.8	17.0	20.7	25.6	17.5	20.6	27.3	16.9	21.0	18.0	13.0	15.3
26	28.2	15.7	21.4	27.8	16.0	20.7	26.7	15.8	20.7	18.9	13.0	15.4
27	28.6	16.7	21.5	28.0	15.9	21.3	24.0	16.4	19.3	18.8	12.0	15.2
28	28.6	16.5	21.6	27.1	16.6	21.3	22.8	15.9	19.0	19.0	13.0	15.6
29	28.2	16.5	22.1	28.3	15.5	21.5	24.6	15.0	18.4	20.6	12.7	16.1
30	27.0	16.7	21.7	28.6	16.5	22.2	25.3	14.8	19.4	20.2	12.5	16.1
31	---	---	---	28.3	16.9	22.1	26.3	15.9	20.2	---	---	---
MONTH	28.9	12.3	20.3	29.6	15.5	22.0	28.4	13.2	20.0	25.8	12.0	17.6

06758500 SOUTH PLATTE RIVER NEAR WELDONA, CO

LOCATION.--Lat 40°19'19", long 103°55'17", in SW¹/₄SW¹/₄ sec.7, T.4 N., R.58 W., Morgan County, Hydrologic Unit 10190003, on left bank 500 ft downstream from bridge on State Highway 144, 2.8 mi southeast of Weldona, and 4.2 mi upstream from Bijou Creek.

DRAINAGE AREA.--13,245 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1952 to current year. Statistical summary computed for 1976 to current year.

REVISED RECORDS.--WSP 1710: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 4,307.80 ft above sea level. Prior to May 2, 1991, gage located 100 ft upstream, at same datum.

REMARKS.--No estimated daily discharges. Records fair. Natural flow of stream affected by transmountain and transbasin diversions, storage reservoirs, power developments, ground-water withdrawals, and diversions for irrigation, and return flow from irrigated areas.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	137	517	326	140	576	200	575	134	211	95	74	71
2	123	672	290	158	447	275	461	143	189	96	82	70
3	113	476	282	179	319	657	297	118	162	89	76	68
4	107	409	275	261	292	803	215	111	254	90	75	67
5	119	380	271	294	293	691	153	102	524	143	76	66
6	128	364	262	296	292	540	138	106	827	182	73	61
7	143	380	261	298	246	377	130	191	469	435	72	58
8	185	348	255	303	198	212	136	181	92	338	75	60
9	217	294	249	299	181	147	131	179	166	201	77	64
10	249	311	253	311	184	140	96	181	195	275	79	67
11	246	310	251	315	165	129	69	181	163	265	71	71
12	259	295	247	284	154	148	52	183	112	219	69	73
13	262	351	243	252	158	180	32	185	71	198	67	98
14	277	376	249	231	163	186	28	192	54	184	69	121
15	309	359	250	277	180	215	31	222	61	171	70	176
16	333	351	250	391	181	239	70	216	63	173	90	295
17	356	343	249	326	162	253	55	224	78	234	99	213
18	267	342	246	250	163	268	72	221	64	214	101	153
19	259	340	272	254	189	309	80	225	80	303	96	130
20	257	343	299	366	209	386	82	221	86	250	90	106
21	252	339	295	456	201	446	81	235	102	213	84	113
22	280	359	288	589	198	462	80	187	138	150	73	134
23	257	355	291	515	205	447	65	172	93	181	69	123
24	251	342	287	479	208	557	58	191	115	85	73	109
25	325	343	281	506	209	507	124	243	146	79	73	118
26	387	363	277	494	205	493	177	1040	140	84	74	98
27	410	329	286	370	228	494	175	625	125	91	80	95
28	408	323	253	347	211	562	145	311	136	92	72	95
29	404	355	155	350	---	625	143	196	120	87	71	104
30	410	370	143	415	---	611	140	272	100	80	77	124
31	419	---	151	580	---	606	---	205	---	76	75	---
TOTAL	8149	11039	7987	10586	6417	12165	4091	7193	5136	5373	2402	3201
MEAN	263	368	258	341	229	392	136	232	171	173	77.5	107
MAX	419	672	326	589	576	803	575	1040	827	435	101	295
MIN	107	294	143	140	154	129	28	102	54	76	67	58
AC-FT	16160	21900	15840	21000	12730	24130	8110	14270	10190	10660	4760	6350

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2002, BY WATER YEAR (WY)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	549	512	593	731	678	527	766	1766	2338	764	634	660															
MAX	3119	2298	1266	1443	1562	1494	3226	10130	12310	5121	2208	2118															
(WY)	1985	1985	1986	1984	1984	1983	1983	1980	1983	1995	1984	1984															
MIN	134	100	115	259	229	132	119	183	101	173	77.5	107															
(WY)	1977	1977	1995	1995	2002	1978	1982	1981	1977	2002	2002	2002															

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1976 - 2002

ANNUAL TOTAL	166528	83739	
ANNUAL MEAN	456	229	a876
HIGHEST ANNUAL MEAN			2995
LOWEST ANNUAL MEAN			229
HIGHEST DAILY MEAN	4190	May 7	1040
LOWEST DAILY MEAN	49	May 2	28
ANNUAL SEVEN-DAY MINIMUM	110	Apr 28	48
MAXIMUM PEAK FLOW			1270
MAXIMUM PEAK STAGE			3.77
ANNUAL RUNOFF (AC-FT)	330300	166100	634500
10 PERCENT EXCEEDS	753	417	1540
50 PERCENT EXCEEDS	380	201	467
90 PERCENT EXCEEDS	151	73	154

- e Estimated.
- a Average discharge for 22 years (water years 1953-74), 572 ft³/s; 414400 acre-ft/yr, prior to completion of Chatfield Dam.
- b Maximum daily discharge for period of record, 20800 ft³/s, May 9, 1973.
- c Also occurred Apr 14, 2002.
- d Maximum discharge and stage for period of record, 26800 ft³/s, May 8, 1973, gage height, 11.68 ft, from rating curve extended above 16000 ft³/s.

PLATTE RIVER BASIN

06758500 SOUTH PLATTE RIVER NEAR WELDONA, CO--Continued

WATER-QUALITY RECORDS

REMARKS.--Additional water-quality data were collected as part of a water-quality assessment of drought conditions and are published in the "Drought Synoptic Sampling" section of this report.

PERIOD OF RECORD.--October 1967 to September 1968, October 1971 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	
NOV 27...	1030	312	1440	8.6	.5	13.2	E9	510	124	48.2	128	2	6.77	
MAR 26...	1035	463	1420	7.9	7.5	11.1	E2	490	118	46.6	129	3	7.73	
AUG 02...	1145	86	1710	8.4	20.5	11.0	E110	600	143	59.5	170	3	9.46	
Date	Time	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (TONS PER DAY) (70301)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
NOV 27...	235	445	80.8	1.1	13.1	1070	1010	1.46	903	.017	5.10	.081	.92	
MAR 26...	221	395	88.8	1.1	12.0	1010	935	1.37	1260	.022	--	.043	.88	
AUG 02...	224	562	97.9	1.1	13.9	1290	1210	1.76	300	.046	3.44	E.011	.88	
Date	Time	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS BA) (00671)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM, DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM, DIS-SOLVED (UG/L AS LI) (01130)
NOV 27...	.34	.27	.255	39.1	<.5	260	<.1	E.5	.76	2.5	<10	.11	32.5	
MAR 26...	.72	.54	.494	37.8	<.5	270	E.1	E.6	.92	3.7	<10	.23	31.6	
AUG 02...	.130	.049	.037	45.9	<.5	310	E.1	<.8	.70	3.3	<10	E.06	43.0	
Date	Time	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)					
NOV 27...			20.8	4.9	.28	3	<1	1320	1.9	5				
MAR 26...			12.7	7.3	1.77	4	<1	1220	.5	10				
AUG 02...			40.1	7.4	4.23	5	<1	1660	3.8	3				

E Estimated laboratory analysis value.

06759500 SOUTH PLATTE RIVER AT FORT MORGAN, CO

LOCATION.--Lat 40°16'12", long 103°47'56", in SW ¼ NE ¼ sec.31, T.4 N., R.57 W., Morgan County, Hydrologic Unit 10190012, on right bank 0.1 mi downstream from bridge on State Highway 52, 0.3 mi north of Interstate Highway 76.

DRAINAGE AREA.--14,810 mi².

PERIOD OF RECORD.--November 1943 to September 1958, December 2001 to September 2002.

REVISED RECORDS.--WSP 1730: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,260 ft above sea level, from topographical map. Prior to Dec. 7, 2001, at site 0.1 mi upstream at different datum.

REMARKS.--Records fair except for period Apr. 8-24, which is poor. Natural flow of stream affected by transmountain and transbasin diversions, storage reservoirs, power developments, ground-water withdrawals, and return flow from irrigated areas. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data for Gaging Stations" section of this report.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period December to September, 1680 ft³/s, Mar. 3, gage height 11.83 ft.; minimum daily, 35 ft³/s, June 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	227	509	e229	570	97	133	63	79	58
2	---	---	---	217	457	245	496	91	116	83	82	54
3	---	---	---	240	347	e612	349	78	101	83	81	58
4	---	---	---	289	311	e760	246	57	152	93	80	52
5	---	---	---	332	308	e664	192	47	299	86	81	53
6	---	---	---	337	303	549	166	43	516	105	84	52
7	---	---	320	330	279	429	159	82	405	218	89	50
8	---	---	316	333	230	297	e150	91	132	291	83	51
9	---	---	310	329	217	224	e137	100	143	139	84	54
10	---	---	316	339	202	197	e114	97	137	179	99	53
11	---	---	317	330	204	183	e105	102	112	173	81	66
12	---	---	318	321	196	e179	e90	101	74	164	75	66
13	---	---	311	299	202	208	e76	121	49	149	75	80
14	---	---	301	276	209	207	e77	109	44	133	76	87
15	---	---	303	266	219	220	e77	135	55	121	77	87
16	---	---	301	348	214	253	e95	131	46	153	86	266
17	---	---	300	365	201	265	e85	147	56	166	98	182
18	---	---	304	293	211	e274	e103	141	47	163	100	103
19	---	---	311	275	208	e314	e112	137	35	203	99	77
20	---	---	314	340	230	e363	e116	128	48	198	98	52
21	---	---	304	375	226	e433	e115	131	47	210	92	54
22	---	---	298	475	224	448	e113	143	59	133	87	69
23	---	---	290	474	231	442	e92	116	45	198	80	71
24	---	---	282	442	238	519	e45	120	45	115	75	53
25	---	---	282	459	240	502	49	143	76	102	75	57
26	---	---	289	457	e239	e483	120	615	85	96	70	46
27	---	---	299	383	252	481	121	465	62	89	88	50
28	---	---	283	336	e235	497	111	194	45	103	67	46
29	---	---	244	332	---	e576	103	107	45	114	74	46
30	---	---	237	355	---	577	111	144	44	97	77	62
31	---	---	227	495	---	586	---	131	---	86	66	---
TOTAL	---	---	---	10669	7142	12216	4495	4344	3253	4306	2558	2155
MEAN	---	---	---	344	255	394	150	140	108	139	82.5	71.8
MAX	---	---	---	495	509	760	570	615	516	291	100	266
MIN	---	---	---	217	196	179	45	43	35	63	66	46
AC-FT	---	---	---	21160	14170	24230	8920	8620	6450	8540	5070	4270

e Estimated.

06764000 SOUTH PLATTE RIVER AT JULESBURG, CO

LOCATION.--Lat 40°58'46", long 102°15'15", in NW¹/₄NE¹/₄ and NE¹/₄SE¹/₄ (two channels) sec.33, T.12 N., R.44 W., Sedgwick County, Hydrologic Unit 10190018, on left bank of channel 4 (left channel) 215 ft downstream from bridge, on right bank of channel 2, 5 ft downstream from bridge on U.S. Highway 385, and on left bank of channel 1, 5 ft upstream from bridge on U.S. Highway 385, 0.9 mi southeast of Julesburg, 3.0 mi upstream from Colorado-Nebraska State line, and 8 mi downstream from Lodgepole Creek.

DRAINAGE AREA.--23,193 mi².

PERIOD OF RECORD.--April 1902 to current year. Monthly discharge only for some periods, published in WSP 1310. Published as "near Julesburg" 1903-8, 1915-16, and as "at Ovid" 1922-24.

REVISED RECORDS.--WSP 1310: 1902, 1906-7, 1948(P). WSP 1440: 1903-4. WDR CO-86-1: Drainage area.

GAGE.--Three water-stage recorders with satellite telemetry. Datum of gages is 3,446.76 ft above sea level. See WSP 1710 or 1730 for history of changes prior to Oct. 1, 1956. Since Oct. 1, 1956, water-stage recorders on channels nos. 2 and 4. Channel no. 2: Oct. 1, 1956 to Sept. 22, 1965, at site 300 ft downstream at present datum. Channel no. 4: Oct. 1, 1956 to Dec. 10, 1958, at site 135 ft downstream at present datum. Since May 11, 1973, supplementary water-stage recorder on channel no. 2 at bridge 800 ft upstream at same datum. Since Aug. 16, 1996, water-stage recorder on channel no. 1; satellite telemetry installed Oct. 24, 1996.

REMARKS.--Records fair except for period Nov. 26 to Mar. 14, and estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation of about 1,200,000 acres upstream from station, and return flow from irrigated areas. Water-quality data were collected as part of a water-quality assessment of drought conditions and are published in the "Drought Synoptic Sampling" section of this report.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	87	e315	e272	e400	e228	127	52	30	24	23	17
2	121	79	e394	e272	e409	e268	134	50	24	24	21	16
3	122	67	e485	e272	455	e314	137	48	48	25	20	17
4	123	153	e559	e272	529	e314	142	43	171	27	18	18
5	142	185	551	e272	550	e314	137	41	89	35	45	16
6	157	218	448	281	505	e314	131	36	80	63	e22	16
7	182	210	e390	331	430	e431	130	35	81	76	e19	16
8	158	217	e331	334	357	e541	126	48	68	31	18	18
9	163	224	e274	358	319	e543	108	44	57	31	19	29
10	175	214	e243	299	277	e431	141	44	53	27	18	27
11	196	201	e221	270	396	e316	126	43	52	36	15	22
12	194	156	e221	261	273	e259	117	31	43	29	16	20
13	205	144	e216	260	265	e259	148	30	31	26	21	18
14	231	e152	e210	249	262	207	139	28	26	23	19	18
15	204	157	e215	e248	256	180	104	25	29	22	19	19
16	136	179	e193	e248	253	131	86	24	33	22	18	18
17	117	107	e213	244	254	116	78	25	31	20	20	15
18	107	94	e235	e247	257	105	69	24	32	21	22	16
19	103	123	e187	e275	262	97	67	23	e31	22	15	16
20	96	172	165	286	261	93	71	26	e30	26	15	15
21	89	167	170	301	256	101	67	25	25	27	e15	16
22	97	174	169	344	251	115	59	26	22	22	e14	17
23	86	211	e253	380	250	80	52	25	26	17	e15	16
24	86	248	e253	429	251	67	50	26	26	17	e18	17
25	66	258	e249	e389	238	66	50	26	25	17	e16	16
26	57	214	e253	371	155	59	53	27	26	20	e23	16
27	53	e149	279	433	169	52	54	23	25	19	e22	18
28	70	e196	e278	403	216	49	54	22	26	19	e20	19
29	70	e180	e272	e371	---	52	50	22	24	20	21	20
30	70	e242	e272	e360	---	64	49	22	e25	16	22	19
31	89	---	e272	359	---	111	---	22	---	17	17	---
TOTAL	3885	5178	8786	9691	8756	6277	2856	986	1289	821	606	541
MEAN	125	173	283	313	313	202	95.2	31.8	43.0	26.5	19.5	18.0
MAX	231	258	559	433	550	543	148	52	171	76	45	29
MIN	53	67	165	244	155	49	49	22	22	16	14	15
AC-FT	7710	10270	17430	19220	17370	12450	5660	1960	2560	1630	1200	1070

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1902 - 2002, BY WATER YEAR (WY)

	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	316	356	419	535	616	555	550	1064	1489	306	188	249																																																																																									
MAX	2427	2358	1371	1571	1864	2200	2808	9922	12200	5059	1882	1964																																																																																									
(WY)	1985	1985	1985	1998	1930	1939	1983	1980	1983	1983	1997	1984																																																																																									
MIN	5.85	23.0	18.8	89.9	78.9	56.9	17.3	24.1	8.33	2.15	2.52	5.60																																																																																									
(WY)	1904	1911	1912	1965	1935	1904	1904	1911	1910	1903	1902	1903																																																																																									

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1902 - 2002
ANNUAL TOTAL	98948	49672	
ANNUAL MEAN	271	136	557
HIGHEST ANNUAL MEAN			2882
LOWEST ANNUAL MEAN			76.3
HIGHEST DAILY MEAN	3140	May 9	30800
LOWEST DAILY MEAN	10	Jun 29	a0.00
ANNUAL SEVEN-DAY MINIMUM	23	Jun 28	0.00
MAXIMUM PEAK FLOW			37600
MAXIMUM PEAK STAGE			c10.44
ANNUAL RUNOFF (AC-FT)	196300	98520	403400
10 PERCENT EXCEEDS	550	314	1180
50 PERCENT EXCEEDS	190	86	232
90 PERCENT EXCEEDS	40	18	29

e Estimated.

a Also occurred Aug 19-20, 1902, and Jul 25 to Aug 7, 1903.

b Gage height recorded for channel #1. Maximum gage height, 4.52 ft, Dec 5.

c From floodmarks in gage well.

07079300 EAST FORK ARKANSAS RIVER AT HIGHWAY 24 NEAR LEADVILLE, CO

LOCATION.--Lat 39°16'21", long 106°18'21", in NW¹/₄NW¹/₄ sec.14, T.9 S., R.80 W., Lake County, Hydrologic Unit 11020001, on right bank 20 ft downstream from U.S. Highway 24, 0.4 mi downstream from Leadville Mine Drainage Tunnel, 1.5 mi northwest of Leadville, and 2.2 mi upstream from Tennessee Creek.

DRAINAGE AREA.--49.9 mi².

PERIOD OF RECORD.--May 1990 to current year. Daily record for water temperature, specific conductance, and pH available, May 1990 to September 1996.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,900 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions (see elsewhere in this report). Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	15	e13	e10	e8.9	e7.8	13	26	62	19	11	9.0
2	19	15	13	e9.9	e8.8	e7.7	13	25	60	18	11	8.9
3	19	14	13	e9.7	e8.7	e7.6	12	23	57	19	11	8.7
4	18	14	e13	e9.6	e8.6	e7.5	12	24	52	22	11	8.9
5	17	14	13	e9.8	e8.5	e7.4	12	27	50	20	11	8.9
6	18	14	13	e9.9	e8.4	e7.3	12	31	50	19	12	8.9
7	18	14	13	e9.7	e8.4	e7.4	12	38	54	18	16	9.0
8	18	14	e13	e9.8	e8.4	e8.4	12	40	54	19	17	9.3
9	18	e13	e13	e9.9	e8.4	e8.6	12	32	52	18	15	9.9
10	18	e13	e13	e9.9	e8.3	e8.8	12	31	51	16	13	11
11	17	e13	e13	e9.8	e8.3	e9.1	12	31	48	16	12	10
12	17	13	e13	e9.8	e8.2	e9.4	13	38	44	14	11	11
13	17	13	e12	e9.7	e8.2	e9.4	13	32	41	14	11	11
14	17	14	e12	e9.7	e8.1	e9.5	14	38	39	13	10	10
15	17	13	e12	e9.6	e8.1	e9.5	13	40	38	14	9.7	9.9
16	16	13	e12	e9.5	e8.0	e9.6	13	45	35	12	9.6	9.9
17	16	13	e12	e9.6	e8.0	e9.5	13	42	34	11	9.4	10
18	16	13	e12	e9.7	e8.0	e9.5	13	55	33	12	9.4	13
19	15	14	e11	e9.8	e8.0	e9.5	13	64	32	12	9.5	12
20	16	e13	e11	e9.9	e8.2	e9.5	14	62	30	12	9.8	12
21	15	e13	e11	e9.8	e8.2	e9.4	14	69	32	13	10	12
22	16	13	e11	e9.8	e8.1	9.4	14	58	31	12	10	11
23	16	13	e11	e9.7	e8.1	9.5	14	50	29	13	9.8	11
24	16	13	e11	e9.6	e8.1	9.5	14	45	26	12	9.6	11
25	15	13	e10	e9.6	e8.1	9.5	15	40	25	12	9.4	11
26	16	e13	e10	e9.5	e8.0	9.6	16	42	24	14	9.1	14
27	16	e13	e10	e9.4	e7.9	9.6	18	41	24	14	9.0	15
28	16	e13	e10	e9.3	e7.8	10	17	44	22	13	9.3	14
29	16	e13	e10	e9.1	---	11	18	51	22	12	9.4	14
30	16	13	e11	e9.0	---	11	23	63	20	11	9.4	14
31	16	---	e10	e9.0	---	12	---	64	---	11	9.0	---
TOTAL	521	402	365	299.1	230.8	283.5	416	1311	1171	455	333.4	328.3
MEAN	16.81	13.40	11.77	9.648	8.243	9.145	13.87	42.29	39.03	14.68	10.75	10.94
MAX	20	15	13	10	8.9	12	23	69	62	22	17	15
MIN	15	13	10	9.0	7.8	7.3	12	23	20	11	9.0	8.7
AC-FT	1030	797	724	593	458	562	825	2600	2320	902	661	651

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2002, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	19.04	14.66	12.20	10.44	10.06	10.33	14.03	94.36	210.5	91.16	39.47	24.14	
MAX	23.4	18.1	15.4	13.0	13.3	13.0	19.8	205	404	266	75.1	32.2	
(WY)	2000	1996	1996	1996	1997	1997	1996	1996	1996	1995	1995	1995	
MIN	15.1	10.8	10.1	9.05	7.10	8.74	10.5	38.4	38.9	14.7	10.8	10.9	
(WY)	1995	1992	1992	2001	1993	1995	1993	1995	2002	2002	2002	2002	

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1990 - 2002

ANNUAL TOTAL	15629.5	6116.1	
ANNUAL MEAN	42.82	16.76	46.50
HIGHEST ANNUAL MEAN			73.0
LOWEST ANNUAL MEAN			16.7
HIGHEST DAILY MEAN	333	Jun 2	811
LOWEST DAILY MEAN	e7.8	Mar 18	6.0
ANNUAL SEVEN-DAY MINIMUM	e8.0	Mar 13	6.7
MAXIMUM PEAK FLOW			a1010
MAXIMUM PEAK STAGE		b3.06	c4.23
ANNUAL RUNOFF (AC-FT)	31000	12130	33690
10 PERCENT EXCEEDS	116	36	127
50 PERCENT EXCEEDS	16	13	17
90 PERCENT EXCEEDS	9.0	8.8	9.6

e Estimated.

a From rating curve extended above 517 ft³/s.

b Maximum gage height, 3.92 ft, Dec 20, backwater from ice.

c Maximum gage height, 4.41 ft, Jun 26, 1999.

07081200 ARKANSAS RIVER NEAR LEADVILLE, CO

LOCATION.--Lat 39°15'26", long 106°20'35", in NW¹/₄NW¹/₄ sec.21, T.9 S., R.80 W., Lake County, Hydrologic Unit 11020001, on right bank 500 ft downstream from confluence of East Fork Arkansas River and Tennessee Creek, 0.5 mi downstream from highway bridge, and 2.8 mi northwest of Leadville.

DRAINAGE AREA.--98.8 mi².

PERIOD OF RECORD.--October 1967 to September 1983, April 1990 to current year. Daily record for water temperature, specific conductance, and pH available, May 1990 to September 1996.

REVISED RECORDS.--WDR CO-91-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,730 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions (see elsewhere in this report) and diversions for irrigation and municipal use. Several measurements of water temperature and specific conductance were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	23	18	e17	e15	e14	27	65	128	34	13	9.4
2	27	22	20	e17	e15	e14	29	59	121	31	13	9.2
3	27	21	21	e16	e15	e14	31	53	113	34	14	9.3
4	25	21	20	e16	e14	e14	44	58	102	46	14	10
5	25	21	19	e15	e14	e14	44	64	99	39	15	8.8
6	25	21	19	e15	e14	e14	39	72	91	35	14	8.8
7	25	21	19	e16	e14	e14	35	82	93	31	19	8.8
8	25	23	e18	e16	e14	e14	37	87	94	37	21	9.0
9	26	21	e18	e17	e14	e15	40	72	94	30	19	9.4
10	25	20	e18	e17	e14	e16	38	70	93	26	17	14
11	24	20	e17	e17	e14	16	40	68	88	25	15	13
12	24	22	e17	e16	e14	16	42	78	81	22	13	16
13	24	22	e16	e16	e14	16	40	69	75	22	12	16
14	24	22	e16	e16	e14	17	45	75	71	21	12	14
15	24	22	e16	e15	e14	17	47	77	69	21	11	12
16	23	21	e16	e15	e14	17	43	90	66	20	10	12
17	23	21	e16	e15	e14	16	36	85	62	18	9.9	12
18	23	21	e16	e15	e13	16	37	97	60	19	9.8	19
19	22	20	e15	e15	e13	17	37	110	58	17	9.7	19
20	22	19	e15	e15	e13	16	39	108	55	17	10	18
21	22	19	e15	e15	e14	16	35	119	58	19	11	18
22	22	21	e16	e15	e14	16	33	112	56	18	12	16
23	24	21	e16	e15	e14	16	34	92	52	18	11	15
24	24	21	e15	e15	e14	16	35	84	49	18	11	15
25	22	21	e15	e15	e15	16	39	76	48	17	10	15
26	22	20	e15	e15	e14	16	46	73	45	20	10	22
27	22	e20	e15	e15	e14	16	48	72	44	20	9.3	25
28	23	e19	e15	e15	e14	17	42	78	42	18	9.7	23
29	24	19	e15	e15	---	19	44	90	38	16	10	23
30	23	18	e16	e15	---	21	57	106	36	15	10	23
31	23	---	e17	e15	---	24	---	125	---	13	9.6	---
TOTAL	740	623	520	482	393	500	1183	2566	2181	737	385.0	442.7
MEAN	23.87	20.77	16.77	15.55	14.04	16.13	39.43	82.77	72.70	23.77	12.42	14.76
MAX	27	23	21	17	15	24	57	125	128	46	21	25
MIN	22	18	15	15	13	14	27	53	36	13	9.3	8.8
AC-FT	1470	1240	1030	956	780	992	2350	5090	4330	1460	764	878

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2002, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
26.88	21.34	16.64	14.80	14.48	15.31
30.80	168.5	338.2	133.6	59.96	34.36
38.3	28.9	21.7	19.0	20.5	20.8
52.9	412	707	382	138	55.8
1971	1971	1983	1996	1973	1971
1989	1996	1997	1995	1997	1982
16.5	11.6	11.6	9.15	7.93	8.82
12.7	55.3	72.7	23.8	12.4	14.8
1978	1977	1978	1977	1978	1974
1970	1981	2002	2002	2002	2002

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1968 - 2002

ANNUAL TOTAL	24545	10752.7	
ANNUAL MEAN	67.25	29.46	73.76
HIGHEST ANNUAL MEAN			120
LOWEST ANNUAL MEAN			29.5
HIGHEST DAILY MEAN	430	May 28	1120
LOWEST DAILY MEAN	e12	Jan 23	8.8
ANNUAL SEVEN-DAY MINIMUM	e13	Mar 12	9.1
MAXIMUM PEAK FLOW			142
MAXIMUM PEAK STAGE			2.83
ANNUAL RUNOFF (AC-FT)	48690	21330	53430
10 PERCENT EXCEEDS	165	71	204
50 PERCENT EXCEEDS	24	19	26
90 PERCENT EXCEEDS	14	13	13

e Estimated.

a Also occurred Feb 4-20, 1978.

b From rating curve extended above 964 ft³/s.

c Maximum gage height, 4.47 ft, Jun 15, 1978.

ARKANSAS RIVER BASIN

07083000 HALFMOON CREEK NEAR MALTA, CO--Continued
(Hydrologic Benchmark station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1966 to March 1996, May 2001 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: May 1967 to September 1982.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	CALCIUM DIS-SOLVED (MG/L) AS CA (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) AS MG (00925)	SODIUM, DIS-SOLVED (MG/L) AS NA (00930)	POTAS-SIUM, DIS-SOLVED (MG/L) AS K (00935)	ALKA-LINITY WAT.DIS FET LAB (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	CHLO-RIDE, DIS-SOLVED (MG/L) AS CL (00940)
MAY 01...	1045	16	66	7.8	2.2	--	7.25	2.93	1.08	.58	29	4.02	.24
JUN 04...	1100	51	59	6.6	4.5	8.6	6.29	2.33	.76	.46	25	3.49	.14
JUL 11...	0940	15	83	7.2	10.3	7.9	8.65	3.22	1.11	.50	34	5.03	.15
AUG 07...	1045	10	88	7.6	10.2	--	8.62	3.32	1.20	.59	38	5.66	.24
SEP 05...	1040	6.1	95	7.9	7.4	--	10.4	4.14	1.47	.70	41	6.44	.23

Date	SILICA, DIS-SOLVED (MG/L) AS SIO2 (00955)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L) AS N (00623)	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L) AS P (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L) AS C (00681)
MAY 01...	4.52	.094	.047	E.08	<.004	<.007	2.2
JUN 04...	3.52	.155	<.015	--	--	--	1.1
JUL 11...	4.49	.107	<.015	--	--	--	.7
AUG 07...	5.14	.120	<.015	--	--	--	.9
SEP 05...	5.92	.100	<.015	--	--	--	.6

E Estimated laboratory analysis value.

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 03...	1300	11	89	8.5	MAY 01...	1000	16	65	2.0
NOV 06...	1700	8.1	87	4.0	NOV 01...	1015	16	65	2.5
DEC 06...	1415	5.7	88	.0	JUN 04...	1035	51	55	4.0
JAN 04...	1515	4.8	90	.0	JUL 11...	1030	15	83	10.5
FEB 07...	1200	4.8	94	.0	AUG 07...	0930	10	86	8.5
MAR 07...	1040	4.4	92	.0	SEP 05...	1130	5.9	91	9.5
APR 05...	1930	9.4	87	2.0					

07086000 ARKANSAS RIVER AT GRANITE, CO

LOCATION.--Lat 39°02'34", long 106°15'55", in SE¹/₄SW¹/₄ sec.31, T.11 S., R.79 W., Chaffee County, Hydrologic Unit 11020001, on right bank at Granite, 100 ft east of U.S. Highway 24, 100 ft downstream from county bridge, and 200 ft upstream from Cache Creek.

DRAINAGE AREA.--427 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April to October 1895, May to December 1897, August to September 1898, March to October 1899, April to May 1901 (gage heights and discharge measurements only in 1895, 1899, and 1901), April 1910 to current year. Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS.--WSP 1117: Drainage area. WSP 1711: 1952, 1956(M).

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 8,914.86 ft above sea level, supplementary adjustment of 1960. Prior to Apr. 6, 1910, nonrecording gages near present site at different datums. Apr. 6, 1910 to Oct. 25, 1917, water-stage recorder or nonrecording gage at site 832 ft upstream at different datum. Oct. 26, 1917 to Oct. 26, 1960, water-stage recorder at site 168 ft downstream at present datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, power developments, transmountain diversions from Colorado River Basin (see elsewhere in this report), diversions for irrigation, and return flows from irrigated areas. Flow partly regulated by Turquoise Lake and Twin Lakes Reservoir, on tributaries upstream from station, combined capacity, about 269,700 acre-ft.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	115	e181	e183	e155	e116	159	200	314	175	139	156
2	105	111	183	e175	e155	e110	158	205	305	151	140	156
3	105	108	186	e169	e159	e107	140	200	296	149	145	155
4	104	104	186	170	e157	e108	150	200	286	167	145	146
5	105	104	187	e162	e155	e111	155	209	287	154	136	114
6	104	108	e179	167	e154	e114	148	212	272	145	130	101
7	106	107	e176	167	e160	118	127	211	271	140	159	100
8	108	119	e175	167	e168	120	119	197	272	141	155	101
9	111	108	e173	171	e165	e110	140	176	269	152	147	104
10	115	98	e171	176	e151	e111	156	158	268	138	134	87
11	112	97	e170	e167	e154	116	157	143	265	134	129	81
12	113	104	e168	e166	e155	e118	159	153	257	132	132	83
13	111	107	e166	170	e159	132	154	163	270	129	163	85
14	113	111	e168	e160	e145	124	153	193	326	126	175	79
15	109	105	e165	e159	e130	e94	156	226	324	125	172	75
16	105	114	e162	e167	e131	e87	158	272	319	122	171	72
17	108	147	e165	e165	e132	e78	154	313	316	117	170	71
18	108	149	e170	e164	133	e80	164	334	314	121	170	81
19	105	152	e168	e157	134	e83	181	360	278	124	156	86
20	104	159	e170	e159	139	87	182	363	255	126	151	80
21	104	138	e182	e158	e134	91	172	310	252	159	163	78
22	108	127	e180	e159	e135	95	167	377	252	203	167	77
23	113	128	e174	e164	141	101	178	393	248	202	165	74
24	109	126	e174	e160	137	89	189	287	217	181	162	73
25	103	125	e177	e161	e116	83	190	230	197	164	159	72
26	105	142	e178	e162	e98	89	185	219	183	182	157	82
27	103	e167	e184	e164	e111	97	168	213	178	175	156	88
28	105	e190	e180	e162	e114	123	163	204	191	168	156	88
29	105	e185	e179	e161	---	142	159	207	192	156	156	85
30	110	e187	e182	e160	---	149	171	246	188	142	159	84
31	113	---	e179	e157	---	153	---	298	---	142	158	---
TOTAL	3334	3842	5438	5109	3977	3336	4812	7472	7862	4642	4777	2814
MEAN	108	128	175	165	142	108	160	241	262	150	154	93.8
MAX	115	190	187	183	168	153	190	393	326	203	175	156
MIN	103	97	162	157	98	78	119	143	178	117	129	71
AC-FT	6610	7620	10790	10130	7890	6620	9540	14820	15590	9210	9480	5580

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 2002, BY WATER YEAR (WY)

MEAN	156	130	110	108	114	130	237	694	1271	891	531	242
MAX	356	337	448	419	526	500	667	1711	2146	2367	1239	546
(WY)	1977	1983	1983	1983	1985	1985	1962	1984	1984	1983	1984	1961
MIN	82.4	64.3	48.5	39.8	45.0	55.0	97.1	191	262	150	151	93.8
(WY)	1932	1945	1977	1918	1919	1919	1933	1935	2002	2002	1934	2002

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1910 - 2002	
ANNUAL TOTAL	117332		57415			
ANNUAL MEAN	321		157		386	
HIGHEST ANNUAL MEAN					687	
LOWEST ANNUAL MEAN					157	
HIGHEST DAILY MEAN	1610		393		4990	
LOWEST DAILY MEAN	95		71		11	
ANNUAL SEVEN-DAY MINIMUM	103		77		31	
MAXIMUM PEAK FLOW			450		5360	
MAXIMUM PEAK STAGE			3.30		7.20	
ANNUAL RUNOFF (AC-FT)	232700		113900		279700	
10 PERCENT EXCEEDS	828		222		1040	
50 PERCENT EXCEEDS	186		156		171	
90 PERCENT EXCEEDS	108		99		75	

e Estimated.

ARKANSAS RIVER BASIN

07086000 ARKANSAS RIVER AT GRANITE, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1967 to June 1969, October 1993 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1993 to current year.
 WATER TEMPERATURE: October 1993 to current year.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry.

REMARKS.--Daily specific-conductance records are good. Daily water-temperature records are good. Daily data that are not published are either missing or of unacceptable quality. Reported values are representative of the stream during steady flows based on cross-section comparisons made during the year at flows between 140-157 ft³/s. Additional water-quality data were collected as part of a water-quality assessment of drought conditions and are published in the "Drought Synoptic Sampling" section of this report.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 249 microsiemens/cm, Jan. 16, 1996 and Oct. 1, 1997; minimum, 63 microsiemens/cm, June 10, 2000.
 WATER TEMPERATURE: Maximum, 21.8°C, July 31, 2002; minimum, 0.0°C, on many days.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 188 microsiemens/cm, Oct. 4, 10-12; minimum, 93 microsiemens/cm, Apr. 20-21.
 WATER TEMPERATURE: Maximum, 21.8°C, July 31; minimum 0.0°C, on many days.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	169	165	167	182	171	177	127	108	113	---	---	---
2	182	169	177	178	165	171	125	109	116	---	---	---
3	184	172	179	171	161	167	119	115	117	---	---	---
4	188	180	182	173	166	169	133	116	120	113	105	110
5	185	179	182	172	164	169	127	119	122	113	103	110
6	185	163	171	183	165	173	139	109	120	110	102	107
7	172	167	169	184	174	179	---	---	---	110	106	109
8	172	167	170	182	175	178	---	---	---	114	107	111
9	183	170	178	182	169	174	---	---	---	116	112	115
10	188	175	180	175	161	167	---	---	---	118	113	116
11	188	176	181	176	163	169	126	104	112	116	104	110
12	188	167	173	176	166	170	122	110	115	110	104	108
13	170	165	168	183	164	173	130	107	114	113	106	110
14	172	167	169	181	171	175	127	102	112	---	---	---
15	170	165	168	181	172	175	121	98	108	---	---	---
16	182	168	175	178	138	164	121	100	109	---	---	---
17	181	175	178	140	131	135	126	97	104	114	110	112
18	182	176	179	139	133	136	---	---	---	117	106	110
19	181	168	174	136	129	133	---	---	---	109	100	106
20	172	166	169	139	123	129	---	---	---	112	103	108
21	173	165	168	161	122	140	---	---	---	112	105	107
22	171	166	168	161	145	152	---	---	---	118	107	112
23	183	168	176	150	142	145	---	---	---	120	108	115
24	181	170	175	150	142	145	---	---	---	117	106	112
25	184	167	178	148	143	146	---	---	---	115	104	110
26	181	168	174	149	122	137	---	---	---	111	102	108
27	176	162	167	131	109	122	---	---	---	112	102	108
28	173	168	171	126	111	117	---	---	---	111	104	108
29	172	166	169	126	113	117	---	---	---	112	107	110
30	184	167	176	128	113	119	---	---	---	115	109	113
31	183	176	178	---	---	---	---	---	---	113	106	110
MONTH	188	162	174	184	109	154	---	---	---	---	---	---

07086000 ARKANSAS RIVER AT GRANITE, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	111	101	107	134	124	130	146	135	139	111	105	109
2	112	101	106	129	118	124	163	136	143	109	100	105
3	111	104	107	132	120	126	162	149	152	103	100	101
4	111	103	107	130	120	125	156	141	148	103	100	101
5	108	102	106	137	124	129	147	133	139	104	101	102
6	113	102	108	142	129	134	141	128	134	108	100	104
7	117	104	110	134	120	130	144	133	138	119	107	114
8	108	97	104	122	118	120	146	134	139	124	119	122
9	106	95	102	126	111	121	149	131	137	129	122	125
10	107	97	101	131	111	124	132	120	124	138	122	129
11	107	97	103	133	118	128	128	120	123	142	134	138
12	107	97	103	136	124	130	127	114	118	141	133	136
13	112	99	108	149	130	140	121	114	116	138	126	132
14	128	101	114	155	135	143	120	115	118	129	122	125
15	122	104	116	157	137	147	120	112	115	122	113	118
16	114	101	110	163	148	155	118	115	117	113	108	110
17	115	100	111	165	148	158	118	104	113	108	101	105
18	117	107	114	169	153	160	113	101	108	109	99	104
19	120	110	116	174	153	164	103	95	98	107	102	105
20	124	116	120	178	155	167	97	93	95	111	101	104
21	122	104	116	174	152	165	97	93	96	118	111	115
22	115	104	110	165	147	158	101	94	97	115	101	108
23	116	105	112	170	149	160	101	95	97	103	98	100
24	118	110	114	167	156	161	99	95	97	114	102	107
25	129	107	116	165	158	161	100	96	98	122	112	116
26	185	119	138	171	156	162	108	95	101	122	116	119
27	134	116	125	169	145	160	108	106	107	122	116	119
28	138	128	132	148	130	142	123	105	109	123	114	119
29	---	---	---	142	130	134	114	109	111	125	117	121
30	---	---	---	144	131	137	113	111	112	123	115	120
31	---	---	---	147	134	139	---	---	---	115	108	111
MONTH	185	95	112	178	111	143	163	93	118	142	98	114
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	108	102	104	124	113	117	124	118	122	107	105	106
2	104	100	102	133	124	129	120	116	118	108	104	106
3	102	99	100	139	130	132	123	116	120	106	104	105
4	100	97	99	152	139	146	124	118	122	126	104	113
5	108	100	106	144	140	141	137	119	126	136	120	129
6	111	106	108	143	139	141	141	129	136	137	129	135
7	111	104	108	142	139	140	142	132	136	129	126	127
8	105	103	104	145	137	141	142	134	137	129	127	127
9	105	102	103	138	134	137	140	127	132	127	125	126
10	103	99	101	138	134	136	128	124	126	176	127	159
11	110	99	106	141	133	137	---	---	---	176	166	170
12	109	106	107	139	122	130	---	---	---	177	172	174
13	107	96	104	127	121	124	---	---	---	178	165	171
14	104	96	101	125	120	123	113	109	111	165	161	163
15	102	99	100	124	120	122	112	104	109	162	158	161
16	100	97	99	133	120	127	106	102	104	163	159	161
17	99	97	98	135	128	131	104	100	102	173	160	165
18	103	97	101	138	130	135	104	101	102	174	165	169
19	113	101	107	144	127	138	116	101	108	177	161	168
20	113	107	111	---	---	---	118	110	114	162	158	160
21	111	107	109	---	---	---	122	117	119	160	156	159
22	110	107	108	---	---	---	122	116	119	161	156	159
23	110	106	108	---	---	---	117	109	113	159	155	157
24	129	106	111	---	---	---	111	108	110	166	156	159
25	120	114	118	120	116	118	111	106	109	173	164	168
26	128	118	122	125	116	122	109	106	108	176	168	171
27	129	115	122	120	115	118	113	107	109	170	160	165
28	115	113	114	119	113	117	113	111	112	165	158	162
29	115	111	113	122	112	117	115	107	112	167	160	164
30	116	113	114	121	116	119	109	105	108	167	162	165
31	---	---	---	125	119	122	108	105	107	---	---	---
MONTH	129	96	107	---	---	---	---	---	---	178	104	151

ARKANSAS RIVER BASIN

07086000 ARKANSAS RIVER AT GRANITE, CO--Continued

WATER TEMPERATURE (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	12.3	5.4	9.0	6.6	2.1	4.4	2.7	0.0	0.8	---	---	---
2	12.1	6.5	9.4	7.3	0.9	4.2	2.9	0.6	1.6	---	---	---
3	12.7	5.8	9.3	6.8	1.5	4.2	2.5	1.0	1.6	---	---	---
4	12.3	5.0	8.7	7.0	0.9	4.1	2.1	0.3	1.1	1.3	0.3	0.8
5	11.6	5.2	8.2	6.5	1.1	4.0	2.1	0.0	0.8	1.9	0.5	1.0
6	10.4	2.8	6.9	6.2	2.6	4.2	2.2	0.1	0.7	1.9	0.5	1.0
7	8.9	4.4	6.9	5.7	2.7	4.2	---	---	---	3.3	0.7	1.4
8	9.6	4.3	7.1	6.0	2.9	4.3	---	---	---	3.1	0.5	1.3
9	10.1	5.1	7.1	5.3	0.2	2.8	---	---	---	3.3	0.9	1.6
10	8.5	1.7	4.9	3.7	0.0	1.6	---	---	---	3.0	0.0	1.3
11	8.4	1.1	4.8	3.6	0.0	1.5	1.7	0.0	0.4	2.0	0.0	0.6
12	6.8	2.0	4.3	5.2	0.0	2.8	0.9	0.0	0.2	3.2	0.0	1.2
13	4.5	1.3	2.7	5.7	0.6	3.2	0.7	0.0	0.1	2.8	0.1	1.1
14	8.4	1.9	4.9	5.7	1.2	3.6	1.5	0.0	0.3	---	---	---
15	8.3	2.8	5.5	5.2	0.2	2.9	1.3	0.0	0.3	---	---	---
16	8.3	0.9	4.7	5.1	0.0	2.7	1.4	0.0	0.2	---	---	---
17	8.5	1.6	5.2	5.9	1.2	3.5	2.4	0.0	0.4	2.7	0.0	0.7
18	8.7	2.2	5.3	4.0	1.4	2.8	---	---	---	1.5	0.0	0.3
19	8.6	2.3	5.3	4.8	0.9	2.7	---	---	---	1.8	0.0	0.3
20	8.4	1.7	5.1	4.8	0.0	1.9	---	---	---	1.3	0.0	0.3
21	5.9	2.1	4.3	3.9	0.0	1.3	---	---	---	2.9	0.0	0.9
22	8.7	4.3	6.1	4.3	0.3	2.1	---	---	---	1.9	0.1	0.8
23	9.6	3.4	6.0	2.5	0.0	1.4	---	---	---	1.5	0.0	0.6
24	5.5	0.1	2.9	2.6	0.0	0.8	---	---	---	2.0	0.0	0.4
25	6.4	0.1	2.9	1.2	0.0	0.6	---	---	---	2.8	0.0	0.7
26	6.9	0.2	3.7	1.1	0.0	0.3	---	---	---	3.1	0.0	0.8
27	7.0	0.7	3.9	1.0	0.0	0.2	---	---	---	3.0	0.2	1.0
28	6.8	2.8	4.7	1.3	0.0	0.3	---	---	---	1.6	0.5	0.8
29	7.5	2.2	4.9	1.8	0.0	0.5	---	---	---	1.6	0.0	0.7
30	7.8	3.2	5.5	2.2	0.0	0.7	---	---	---	1.1	0.0	0.4
31	7.1	4.5	5.6	---	---	---	---	---	---	1.5	0.0	0.2
MONTH	12.7	0.1	5.7	7.3	0.0	2.5	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	2.3	0.0	0.5	0.4	0.0	0.0	9.0	0.8	4.6	11.6	4.6	8.0
2	1.9	0.0	0.5	0.5	0.0	0.1	9.2	0.7	4.6	8.7	4.6	6.7
3	3.1	0.0	0.7	0.4	0.0	0.0	8.5	0.1	4.4	11.8	3.7	7.3
4	3.0	0.0	0.6	1.9	0.0	0.4	10.1	1.4	5.6	11.6	4.6	7.9
5	2.7	0.0	0.6	3.0	0.0	0.8	7.7	0.2	4.2	12.8	5.0	8.8
6	3.2	0.0	0.8	3.7	0.0	1.2	7.1	1.2	4.3	14.0	5.1	9.2
7	3.4	0.0	0.9	2.7	0.2	1.0	7.5	1.6	4.4	13.4	5.5	9.4
8	2.9	0.0	0.6	2.7	0.0	0.9	10.3	0.7	5.3	13.0	6.2	9.2
9	0.6	0.0	0.1	3.7	0.0	0.8	10.5	1.8	6.2	12.3	3.3	7.7
10	3.1	0.0	0.7	5.2	0.0	1.5	8.4	3.4	5.9	12.4	4.7	8.4
11	3.8	0.0	1.1	4.6	0.0	1.5	10.7	3.1	6.5	14.4	5.2	9.6
12	3.4	0.0	1.0	5.8	0.0	1.9	9.2	2.7	6.0	11.1	4.7	8.1
13	3.7	0.0	0.9	5.1	0.6	2.1	12.0	2.7	7.0	15.1	5.2	9.7
14	2.5	0.0	0.9	2.9	0.0	0.8	12.2	3.8	7.8	13.3	6.1	9.4
15	3.9	0.0	1.0	2.9	0.0	0.6	11.8	4.2	7.8	13.5	6.2	9.7
16	3.6	0.0	0.9	1.4	0.0	0.2	10.5	4.1	6.9	11.4	7.1	9.5
17	4.2	0.0	1.3	1.0	0.0	0.2	7.3	2.1	5.0	13.4	6.4	10
18	3.1	0.5	1.3	1.4	0.0	0.3	10.9	2.4	6.1	14.6	8.6	11.2
19	3.5	0.0	1.0	2.9	0.0	0.7	8.9	1.8	5.2	11.6	7.8	10
20	2.0	0.0	0.8	4.9	0.0	1.2	5.7	1.9	3.5	12.4	7.5	10
21	3.7	0.0	0.9	5.7	0.0	1.6	6.7	0.8	3.6	12.6	7.5	9.6
22	4.3	0.0	1.3	5.6	0.0	1.7	9.8	1.1	5.2	11.5	4.8	8.2
23	4.2	0.0	1.5	4.2	0.0	1.2	10.6	2.5	6.5	9.0	6.2	7.6
24	4.3	0.6	1.7	2.3	0.0	0.6	11.3	4.2	7.5	10.4	5.8	7.7
25	3.7	0.0	0.9	4.3	0.0	1.4	10.8	4.0	7.1	13.9	4.6	9.1
26	0.7	0.0	0.1	5.4	0.0	1.6	12.0	5.7	8.3	12.7	6.4	9.8
27	0.6	0.0	0.1	5.7	0.0	1.9	9.5	4.8	7.0	14.5	7.4	10.6
28	1.8	0.0	0.5	5.8	0.2	2.2	12.5	3.7	7.7	14.0	7.5	10.9
29	---	---	---	7.0	0.2	3.2	12.6	4.2	8.3	15.0	7.4	11.0
30	---	---	---	7.6	0.5	3.7	13.2	4.7	8.6	15.9	8.2	12.0
31	---	---	---	8.4	0.5	4.1	---	---	---	14.8	9.2	12.2
MONTH	4.3	0.0	0.8	8.4	0.0	1.3	13.2	0.1	6.0	15.9	3.3	9.3

ARKANSAS RIVER BASIN

07086000 ARKANSAS RIVER AT GRANITE, CO--Continued

WATER TEMPERATURE (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN									
1	14.8	9.3	12.0	19.4	11.2	15.2	16.7	14.1	15.6	15.8	11.2	13.7
2	16.5	8.9	12.6	17.8	11.6	14.7	18.2	13.0	15.3	19.2	10.7	14.5
3	13.5	8.8	11.4	18.0	10.7	14.2	17.8	14.1	15.7	16.5	12.0	14.1
4	11.5	8.9	10.3	18.9	11.0	14.6	19.3	13.3	16.1	16.2	11.2	13.5
5	15.9	8.4	11.8	16.1	10.9	13.6	18.5	14.0	16.0	17.1	10.0	13.4
6	17.0	8.8	12.9	18.7	11.4	14.8	19.9	13.1	16.1	15.0	10.1	12.8
7	16.9	9.5	13.1	18.5	11.5	15.2	17.8	12.7	15.3	14.8	10.6	12.7
8	17.1	9.5	13.2	20.0	12.4	15.8	18.2	12.0	15.1	16.6	10.7	13.5
9	17.5	10.2	13.7	16.5	12.1	14.6	19.2	11.8	15.3	16.3	12.3	13.9
10	17.6	10.5	14.0	17.8	12.1	14.7	20.1	11.1	15.1	13.6	10.6	12.2
11	17.7	9.9	13.8	20.6	11.3	15.7	---	---	---	14.0	10.3	12.1
12	17.5	9.7	13.7	20.7	12.0	16.3	---	---	---	14.3	9.3	11.8
13	17.2	9.9	13.5	18.0	11.7	15.2	---	---	---	12.9	7.9	10.2
14	16.8	11.5	14.2	17.4	11.8	14.2	19.5	12.5	15.7	15.0	6.5	10.4
15	15.4	12.1	13.9	17.6	10.5	14.2	20.2	12.5	16.0	16.2	7.0	11.5
16	16.0	10.9	13.5	21.1	11.3	15.7	19.8	12.9	16.2	15.3	7.2	11.4
17	17.1	11.1	14.2	17.7	11.6	14.9	19.3	13.1	15.9	15.2	8.2	11.4
18	18.0	11.6	14.6	21.7	11.5	16.0	18.3	13.2	15.5	12.4	7.8	9.9
19	17.5	11.7	14.4	21.6	12.4	15.4	18.5	12.7	15.2	12.1	5.7	8.8
20	15.6	11.9	13.5	---	---	---	17.7	12.9	14.7	13.7	5.1	9.2
21	16.1	11.3	13.3	---	---	---	16.9	12.6	14.4	14.5	5.8	10.0
22	16.9	11.5	14.1	---	---	---	16.8	11.4	14.1	14.3	6.4	10.3
23	18.3	10.6	14.4	---	---	---	17.5	11.2	14.1	13.2	5.6	9.6
24	18.5	11.6	14.7	---	---	---	19.1	11.6	15.0	14.0	5.5	9.7
25	16.5	10.8	13.8	17.1	14.6	16.0	18.5	11.3	14.8	12.8	5.1	9.1
26	16.9	11.1	13.8	19.5	12.6	15.6	18.9	11.1	14.7	12.6	7.7	9.8
27	14.9	10.0	12.8	17.7	12.5	15.1	18.9	12.3	15.2	9.8	5.0	7.5
28	16.5	10.6	13.4	19.0	12.5	15.6	18.2	13.2	15.1	11.5	5.4	8.2
29	17.9	10.1	13.9	20.8	11.8	15.8	16.4	12.5	13.9	11.9	6.7	9.1
30	18.1	10.9	14.3	20.3	12.7	16.3	16.4	10.2	13.2	13.7	7.0	9.9
31	---	---	---	21.8	13.0	16.9	16.5	10.7	13.7	---	---	---
MONTH	18.5	8.4	13.4	---	---	---	---	---	---	19.2	5.0	11.1

07087050 ARKANSAS RIVER BELOW GRANITE, CO

LOCATION.--Lat 38°59'42", long 106°13'11", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.22, T.12 S., R.79 W., Chaffee County, Hydrologic Unit 11020001, on right bank 500 ft east of U.S. Highway 24, 1.0 mi downstream from Pine Creek, and 4.8 mi southeast of Granite.

DRAINAGE AREA.--546 mi².

PERIOD OF RECORD.--March 1999 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,620 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, power developments, transmountain diversions (see elsewhere in this report), diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data for Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 3,280 ft³/s, May 31, 2000, gage height, 8.06 ft; minimum daily, 101 ft³/s, Sept. 15, 22-23, 2002.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 726 ft³/s, May 22, gage height, 4.71 ft; minimum daily, 101 ft³/s, Sept. 15, 22-23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	181	270	546	220	165	165
2	---	---	---	---	---	---	181	280	541	191	165	166
3	---	---	---	---	---	---	157	268	510	186	169	165
4	---	---	---	---	---	---	171	267	466	209	173	157
5	---	---	---	---	---	---	188	280	431	204	168	e127
6	---	---	---	---	---	---	179	302	402	193	163	e114
7	---	---	---	---	---	---	152	341	425	180	191	e113
8	---	---	---	---	---	---	140	326	436	173	183	e114
9	---	---	---	---	---	---	162	247	431	189	175	e117
10	---	---	---	---	---	---	185	217	400	182	167	e107
11	---	---	---	---	---	---	185	191	393	182	160	e102
12	---	---	---	---	---	---	186	212	379	166	158	106
13	---	---	---	---	---	---	180	220	364	156	183	107
14	---	---	---	---	---	---	181	269	408	154	194	103
15	---	---	---	---	---	---	188	322	e400	152	189	101
16	---	---	---	---	---	---	186	379	e400	143	182	104
17	---	---	---	---	---	---	182	431	e400	146	176	103
18	---	---	---	---	---	---	204	473	399	149	183	114
19	---	---	---	---	---	---	232	523	354	150	176	118
20	---	---	---	---	---	---	222	597	326	152	168	108
21	---	---	---	---	---	---	206	485	326	186	181	104
22	---	---	---	---	---	---	199	586	323	225	186	101
23	---	---	---	---	---	---	214	556	316	224	183	101
24	---	---	---	---	---	---	230	393	277	205	180	107
25	---	---	---	---	---	---	234	327	249	186	176	110
26	---	---	---	---	---	---	230	312	233	206	175	122
27	---	---	---	---	---	---	201	298	222	200	175	121
28	---	---	---	---	---	---	192	310	243	195	174	113
29	---	---	---	---	---	---	191	348	241	183	172	106
30	---	---	---	---	---	---	215	441	234	167	171	118
31	---	---	---	---	---	---	---	530	---	168	167	---
TOTAL	---	---	---	---	---	---	5754	11001	11075	5622	5428	3514
MEAN	---	---	---	---	---	---	191.8	354.9	369.2	181.4	175.1	117.1
MAX	---	---	---	---	---	---	234	597	546	225	194	166
MIN	---	---	---	---	---	---	140	191	222	143	158	101
AC-FT	---	---	---	---	---	---	11410	21820	21970	11150	10770	6970

e Estimated.

07091200 ARKANSAS RIVER NEAR NATHROP, CO

LOCATION.--Lat 38°39'08", long 106°03'02", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.23, T.51 N., R.8 E., Chaffee County, Hydrologic Unit 11020001, on right bank 300 ft upstream from end of Chaffee County Road 194 in Browns Canyon, 3.7 mi downstream from Browns Creek, 6.7 mi south of Nathrop, and 9 mi north of Salida.

DRAINAGE AREA.--1,060 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to September 1982. April 1989 to September 1993. October 1993 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,350 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, power developments, transbasin and transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge (occurred during period of seasonal record), 5,540 ft³/s, July 14, 1995, gage height, 8.63 ft, from rating curve extended above 5,500 ft³/s; maximum gage height, 8.94 ft, Aug. 31, 1972 (backwater from unnamed tributary); minimum daily, 95 ft³/s, Feb. 25-27, 1977.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 674 ft³/s, May 22, gage height, 4.52 ft; minimum daily, 175 ft³/s, Sept. 15-17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	265	286	586	303	235	229
2	---	---	---	---	---	---	272	315	588	283	229	229
3	---	---	---	---	---	---	254	319	559	276	233	229
4	---	---	---	---	---	---	251	316	541	281	243	232
5	---	---	---	---	---	---	265	323	499	286	235	210
6	---	---	---	---	---	---	264	344	461	275	226	187
7	---	---	---	---	---	---	252	381	460	268	239	185
8	---	---	---	---	---	---	247	411	485	265	244	186
9	---	---	---	---	---	---	248	346	486	261	234	195
10	---	---	---	---	---	---	257	306	467	257	227	209
11	---	---	---	---	---	---	264	264	452	259	221	184
12	---	---	---	---	---	---	264	267	432	256	215	181
13	---	---	---	---	---	---	262	272	419	255	225	181
14	---	---	---	---	---	---	260	290	453	e257	254	180
15	---	---	---	---	---	---	261	326	472	e255	252	175
16	---	---	---	---	---	---	261	417	469	e242	247	175
17	---	---	---	---	---	---	258	439	456	242	244	175
18	---	---	---	---	---	---	260	523	453	243	245	177
19	---	---	---	---	---	---	281	506	436	244	254	197
20	---	---	---	---	---	---	282	632	370	244	230	192
21	---	---	---	---	---	---	272	518	376	253	245	184
22	---	---	---	---	---	---	263	558	376	286	246	181
23	---	---	---	---	---	---	262	620	367	307	251	180
24	---	---	---	---	---	---	273	484	361	293	247	182
25	---	---	---	---	---	---	285	382	319	267	242	185
26	---	---	---	---	---	---	298	358	317	271	236	191
27	---	---	---	---	---	---	275	345	293	271	236	213
28	---	---	---	---	---	---	267	345	312	265	235	207
29	---	---	---	---	---	---	265	374	312	259	238	201
30	---	---	---	---	---	---	267	435	305	243	237	199
31	---	---	---	---	---	---	---	570	---	239	234	---
TOTAL	---	---	---	---	---	---	7955	12272	12882	8206	7379	5831
MEAN	---	---	---	---	---	---	265.2	395.9	429.4	264.7	238.0	194.4
MAX	---	---	---	---	---	---	298	632	588	307	254	232
MIN	---	---	---	---	---	---	247	264	293	239	215	175
AC-FT	---	---	---	---	---	---	15780	24340	25550	16280	14640	11570

e Estimated.

ARKANSAS RIVER BASIN

07091200 ARKANSAS RIVER NEAR NATHROP, CO--Continued

WATER TEMPERATURE (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	10.8	5.8	8.4	13.3	8.3	11.1
2	---	---	---	---	---	---	10.3	5.8	8.2	11.6	7.7	9.5
3	---	---	---	---	---	---	10.0	4.6	7.3	12.5	6.3	9.3
4	---	---	---	---	---	---	11.1	5.8	8.6	13.3	7.3	10.1
5	---	---	---	---	---	---	10.0	6.2	8.3	14.0	7.7	10.9
6	---	---	---	---	---	---	9.3	6.4	7.8	14.7	8.2	11.4
7	---	---	---	---	---	---	8.8	5.7	7.3	14.7	9.0	11.9
8	---	---	---	---	---	---	10.5	5.4	7.7	12.4	9.2	10.7
9	---	---	---	---	---	---	10.4	6.3	8.5	13.1	7.8	10.5
10	---	---	---	---	---	---	10.6	7.6	9.1	13.3	7.5	10.4
11	---	---	---	---	---	---	11.5	6.9	9.1	13.3	8.7	11.3
12	---	---	---	---	---	---	10.5	6.9	9.0	12.6	9.0	10.9
13	---	---	---	---	---	---	12.5	6.7	9.6	14.7	8.3	11.5
14	---	---	---	---	---	---	13.1	8.0	10.6	14.0	9.8	11.8
15	---	---	---	---	---	---	12.4	9.0	10.8	14.4	9.0	11.6
16	---	---	---	---	---	---	11.4	7.7	9.9	13.1	9.7	11.4
17	---	---	---	---	---	---	10.7	6.9	9.2	15.3	9.5	12.2
18	---	---	---	---	---	---	11.3	6.2	9.0	15.4	10.8	13.1
19	---	---	---	---	---	---	10.8	6.6	8.8	13.9	11.1	12.5
20	---	---	---	---	---	---	9.7	6.4	7.4	13.3	10.1	11.7
21	---	---	---	---	---	---	8.7	3.1	5.9	13.9	10.9	12.2
22	---	---	---	---	---	---	10.4	4.1	7.3	13.0	8.3	10.7
23	---	---	---	---	---	---	12.1	5.6	8.8	11.2	8.5	9.7
24	---	---	---	---	---	---	13.1	7.4	10.4	11.6	8.3	9.7
25	---	---	---	---	---	---	12.3	7.5	10.0	14.1	7.6	10.8
26	---	---	---	---	---	---	12.6	8.7	10.7	13.9	9.4	11.8
27	---	---	---	---	---	---	11.2	7.9	9.6	15.7	9.8	12.6
28	---	---	---	---	---	---	12.9	6.6	9.8	16.5	9.8	13.2
29	---	---	---	---	---	---	13.4	7.7	10.7	14.9	10.4	12.8
30	---	---	---	---	---	---	13.9	7.8	11.0	17.2	10.9	14.0
31	---	---	---	---	---	---	---	---	---	15.9	12.4	14.4
MONTH	---	---	---	---	---	---	13.9	3.1	9.0	17.2	6.3	11.5
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	15.6	12.7	14.2	20.5	13.9	17.2	20.1	16.8	17.6	19.3	10.2	14.0
2	17.0	11.9	14.4	19.3	14.9	17.3	17.5	14.7	16.2	18.5	9.8	14.4
3	15.0	12.0	13.7	18.3	14.7	16.4	17.6	15.6	16.6	19.3	10.5	14.5
4	13.6	11.5	12.5	---	---	---	17.8	15.6	16.8	17.9	10.8	13.7
5	16.4	10.1	13.1	---	---	---	19.3	15.7	17.5	---	---	---
6	17.7	11.8	14.8	---	---	---	18.8	16.0	17.5	16.9	13.8	15.7
7	17.1	12.4	14.9	---	---	---	17.8	15.2	16.6	16.7	13.9	15.2
8	17.0	12.6	14.9	---	---	---	17.1	14.2	15.8	17.2	13.6	15.3
9	17.7	12.7	15.4	---	---	---	18.8	13.6	16.2	17.0	14.5	15.7
10	18.1	13.3	15.7	---	---	---	19.0	13.5	16.4	16.0	13.4	14.0
11	18.0	12.6	15.5	---	---	---	18.8	13.3	16.4	15.0	12.9	14.0
12	18.0	12.5	15.3	---	---	---	18.4	13.4	16.3	15.0	12.7	14.1
13	18.2	12.6	15.5	---	---	---	18.1	14.2	16.4	15.2	12.0	13.8
14	18.7	13.8	16.3	---	---	---	18.8	13.3	16.2	14.6	11.3	13.2
15	17.7	13.7	15.7	---	---	---	19.1	13.4	16.5	15.4	11.3	13.7
16	18.1	13.4	15.7	---	---	---	19.2	14.0	16.7	15.4	12.0	14.2
17	17.4	13.4	15.6	---	---	---	18.6	14.0	16.5	14.8	12.2	13.3
18	18.5	12.8	15.7	---	---	---	17.9	13.6	15.8	13.3	11.3	12.4
19	18.2	13.5	16.0	---	---	---	18.0	13.7	15.8	13.8	10.4	12.2
20	19.4	14.5	16.6	20.7	17.0	19.3	16.6	14.2	15.5	13.5	9.3	12.0
21	18.6	14.5	16.5	22.3	17.3	19.6	17.3	13.7	15.4	14.0	10.0	12.6
22	18.5	13.6	16.0	21.5	17.7	19.5	16.5	13.0	15.0	14.5	11.1	13.2
23	19.0	13.4	16.3	20.0	16.9	18.4	16.9	12.3	14.7	14.3	11.0	13.1
24	19.6	13.7	16.6	21.0	17.0	19.0	17.9	12.6	15.4	14.0	10.3	12.6
25	17.4	13.9	15.8	20.6	17.7	19.1	18.2	13.1	15.9	13.5	10.2	11.9
26	17.7	13.2	15.6	20.4	16.5	18.4	17.9	13.0	15.7	13.6	10.3	11.9
27	17.6	12.8	15.3	19.8	16.6	18.1	18.6	14.3	16.7	12.5	9.2	10.6
28	16.6	13.0	14.8	19.6	15.7	17.7	17.7	14.9	16.3	12.0	9.0	10.7
29	18.7	11.9	15.1	19.7	15.4	17.7	16.5	13.6	15.2	11.9	9.3	10.6
30	19.2	13.2	16.3	19.7	16.2	18.0	16.9	11.8	14.2	13.1	8.9	11.4
31	---	---	---	20.6	16.3	18.3	16.2	10.9	13.9	---	---	---
MONTH	19.6	10.1	15.3	---	---	---	20.1	10.9	16.1	---	---	---

07093700 ARKANSAS RIVER NEAR WELLSVILLE, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1961 to January 1962, February to October 1964, December 1968, April 1969 to September 1975, March 1978 to February 1980, April to October 1987, April 1990 to March 1993, March to September 2002.

WATER-QUALITY DATA COLLECTED AS PART OF PREFERRED STORAGE OPTIONS PLAN, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
JAN 03...	1430	e354	192	.5	JUN 03...	1540	500	144	17.0
FEB 05...	1430	e316	187	2.0	JUL 16...	1740	242	193	23.0
MAR 07...	1415	289	191	7.0	AUG 06...	1445	247	188	21.0
APR 05...	1500	308	198	13.5	SEP 26...	1030	265	175	15.0
29...	1630	298	180	14.5	04...	0900	250	179	13.5

e Estimated value.

07093740 BADGER CREEK, UPPER STATION, NEAR HOWARD, CO

LOCATION.--Lat 38°39'32", long 105°48'48", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.13, T.51 N., R.10 E., Fremont County, Hydrologic Unit 11020001, on left bank 0.1 mi downstream from County Road 2, 1.0 mi upstream from Steer Creek, 14.3 mi north of Howard, and 14.6 mi upstream from mouth.

DRAINAGE AREA.--106 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1980 to September 1986, October 1986 to current year (seasonal records only). Records prior to October 1988 not equivalent because of seepage between sites.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,790 ft above sea level, from topographic map. Prior to Oct. 28, 1988, at site 0.2 mi downstream at different datum. Mar. 24, 1989 to June 30, 1994, at site 0.1 mi downstream at different datum. July 1, 1994 to Aug. 1, 1996, at site 60 ft upstream at datum 1.00 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream may be affected by erosion-control or livestock reservoirs.

AVERAGE DISCHARGE.--5 years (water years 1981-86), 5.89 ft³/s; 4,270 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,360 ft³/s, Aug. 14, 1983, from slope-area measurement of peak flow, gage height, 8.22 ft, site and datum then in use; no flow, July 17-23, 1989.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 358 ft³/s, July 6, from rating curve extended above 6.9 ft³/s on basis of slope-area measurement of peak flow at gage height 3.76 ft, gage height, 4.04 ft, from floodmarks; minimum daily, 0.04 ft³/s, June 11-14, 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.40	---	---	---	---	---	e0.86	0.15	0.21	0.12	0.08	0.06
2	0.43	---	---	---	---	---	e1.2	0.18	0.18	0.08	0.06	0.06
3	0.42	---	---	---	---	---	e1.0	0.17	0.14	0.09	0.07	0.07
4	0.40	---	---	---	---	---	e0.80	0.14	0.19	0.16	0.15	0.06
5	0.40	---	---	---	---	---	e0.50	0.16	0.38	0.27	0.17	0.06
6	0.43	---	---	---	---	---	e0.37	0.10	0.29	23	0.13	0.06
7	0.47	---	---	---	---	---	e0.27	0.15	0.18	13	0.10	0.07
8	0.50	---	---	---	---	---	e0.25	0.14	0.13	0.48	0.11	0.07
9	0.49	---	---	---	---	---	e0.18	0.12	0.08	0.35	0.10	0.08
10	0.45	---	---	---	---	---	e0.16	0.13	0.05	0.37	0.08	0.18
11	0.47	---	---	---	---	---	e0.15	0.14	0.04	0.34	0.06	0.11
12	0.53	---	---	---	---	---	e0.15	0.14	0.04	0.27	0.05	0.10
13	0.53	---	---	---	---	---	e0.15	0.18	0.04	0.19	0.05	0.11
14	0.54	---	---	---	---	---	e0.15	0.14	0.04	0.15	0.06	0.10
15	0.53	---	---	---	---	---	e0.15	0.17	0.06	0.19	0.05	0.10
16	0.55	---	---	---	---	---	e0.15	0.15	0.07	0.16	0.05	0.10
17	0.65	---	---	---	---	---	e0.15	0.14	0.05	0.12	0.05	0.09
18	0.70	---	---	---	---	---	e0.15	0.10	0.05	0.09	0.05	0.10
19	0.69	---	---	---	---	---	e0.20	0.12	0.04	0.07	0.05	0.11
20	0.69	---	---	---	---	---	e0.20	0.18	0.06	0.06	0.06	0.11
21	0.57	---	---	---	---	---	e0.20	0.23	0.06	0.07	0.06	0.08
22	0.61	---	---	---	---	---	e0.20	0.15	0.07	0.10	0.06	0.07
23	0.51	---	---	---	---	---	0.26	0.18	0.06	0.14	0.07	0.07
24	0.47	---	---	---	---	---	0.22	0.31	0.05	0.33	0.06	0.07
25	0.50	---	---	---	---	---	0.18	0.29	0.05	0.20	0.06	0.08
26	0.51	---	---	---	---	---	0.22	0.22	0.06	0.16	0.06	0.08
27	0.57	---	---	---	---	---	0.22	0.22	0.10	0.11	0.06	0.09
28	0.56	---	---	---	---	---	0.15	0.23	0.30	0.08	0.07	0.09
29	0.53	---	---	---	---	---	0.14	0.21	0.34	0.06	0.07	0.11
30	0.53	---	---	---	---	---	0.14	0.20	0.18	0.06	0.06	0.11
31	0.58	---	---	---	---	---	---	0.16	---	0.07	0.06	---
TOTAL	16.21	---	---	---	---	---	9.12	5.30	3.59	40.94	2.27	2.65
MEAN	0.523	---	---	---	---	---	0.304	0.171	0.120	1.321	0.073	0.088
MAX	0.70	---	---	---	---	---	1.2	0.31	0.38	23	0.17	0.18
MIN	0.40	---	---	---	---	---	0.14	0.10	0.04	0.06	0.05	0.06
AC-FT	32	---	---	---	---	---	18	11	7.1	81	4.5	5.3

e Estimated.

07093740 BADGER CREEK, UPPER STATION, NEAR HOWARD, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1981 to September 1986, October 1986 to current year (seasonal records only). Prior to March 1989, at site 1,000 ft downstream, not equivalent because of seepage inflow between sites.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: March 1995 to current year (seasonal records only).
 SUSPENDED-SEDIMENT DISCHARGE: June 1981 to current year (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler and water-temperature probe with satellite telemetry.

REMARKS.--Daily water temperature records are good except for June 17 to July 10, which are fair. Daily suspended-sediment records are fair except for estimated sediment discharges, which are poor. Daily water-temperature data that are not published during period of operation are either missing or of unacceptable quality. Reported daily water-temperature values are representative of the stream during steady flows based on cross-section comparisons made during the year at flows between 0.07-0.27 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE (seasonal only): Maximum, 30.7°C, July 28, 1995, July 18, 1998; minimum, 0.0°C, on many days.
 SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 25,800 mg/L, Aug. 20, 1982; minimum daily mean, 4 mg/L, Aug. 31, Sept. 1, 4, 1988, Aug. 31, 1990.
 SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 15,600 tons, Aug. 14, 1983; minimum daily, 0.0 ton, on many days during 1989-90, 2002.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE (seasonal only): Maximum, 30.5°C, June 23; minimum, 0.0°C, on many days.
 SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 1,040 mg/L, July 6; minimum daily mean, 24 mg/L, May 10.
 SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 380 tons, July 6; minimum daily, 0.0 ton, on many days.

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
OCT						
15...	1530	.51	399	12.5	76	.10
NOV						
02...	1200	.50	378	6.5	15	.02
APR						
02...	1040	.27	352	6.5	--	--
02...	1215	.27	357	6.5	151	.11
22...	1430	.13	362	16.0	--	--
22...	1515	.13	392	16.5	39	.01
MAY						
14...	1430	.16	379	15.5	--	--
14...	1445	.16	395	15.5	14	.01
JUN						
03...	1700	.10	236	18.0	--	--
03...	1745	.10	402	18.0	36	.01
19...	1630	.03	361	25.5	--	--
19...	1700	.03	395	--	56	.0
JUL						
08...	1930	.34	515	20.5	--	--
08...	2030	.34	542	20.5	130	.12
10...	1415	.38	463	18.5	142	.15
29...	1230	.08	383	21.5	--	--
29...	1300	.08	404	21.5	108	.02
AUG						
15...	1215	.06	394	20.0	52	.01
SEP						
06...	1235	.07	405	18.0	--	--
06...	1315	.07	414	19.5	33	.01
27...	1200	.11	431	7.0	21	.01

ARKANSAS RIVER BASIN

07093740 BADGER CREEK, UPPER STATION, NEAR HOWARD, CO--Continued

TEMPERATURE, WATER (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	14.3	2.9	8.6	---	---	---	---	---	---	---	---	---
2	16.7	3.1	9.2	---	---	---	---	---	---	---	---	---
3	17.5	3.1	9.6	---	---	---	---	---	---	---	---	---
4	16.9	2.3	8.7	---	---	---	---	---	---	---	---	---
5	16.0	4.6	8.5	---	---	---	---	---	---	---	---	---
6	14.6	0.2	6.7	---	---	---	---	---	---	---	---	---
7	13.7	1.4	7.2	---	---	---	---	---	---	---	---	---
8	15.1	1.6	7.7	---	---	---	---	---	---	---	---	---
9	11.9	2.9	6.6	---	---	---	---	---	---	---	---	---
10	9.5	0.1	3.5	---	---	---	---	---	---	---	---	---
11	9.4	0.1	3.3	---	---	---	---	---	---	---	---	---
12	9.6	0.5	3.8	---	---	---	---	---	---	---	---	---
13	11.6	0.1	4.1	---	---	---	---	---	---	---	---	---
14	13.2	0.0	5.0	---	---	---	---	---	---	---	---	---
15	12.7	0.2	5.2	---	---	---	---	---	---	---	---	---
16	11.3	0.0	3.8	---	---	---	---	---	---	---	---	---
17	11.9	0.0	4.4	---	---	---	---	---	---	---	---	---
18	10.0	0.0	4.3	---	---	---	---	---	---	---	---	---
19	12.8	0.0	5.0	---	---	---	---	---	---	---	---	---
20	9.5	0.0	3.4	---	---	---	---	---	---	---	---	---
21	8.1	0.0	3.4	---	---	---	---	---	---	---	---	---
22	9.7	2.4	5.2	---	---	---	---	---	---	---	---	---
23	11.3	0.2	4.7	---	---	---	---	---	---	---	---	---
24	8.0	0.0	2.7	---	---	---	---	---	---	---	---	---
25	8.3	0.0	2.5	---	---	---	---	---	---	---	---	---
26	9.4	0.0	2.9	---	---	---	---	---	---	---	---	---
27	9.2	0.0	2.8	---	---	---	---	---	---	---	---	---
28	9.4	0.7	3.9	---	---	---	---	---	---	---	---	---
29	11.1	0.0	4.6	---	---	---	---	---	---	---	---	---
30	10.3	1.7	5.3	---	---	---	---	---	---	---	---	---
31	9.3	2.7	5.0	---	---	---	---	---	---	---	---	---
MONTH	17.5	0.0	5.2	---	---	---	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	6.8	0.0	2.9	20.2	0.0	8.1
2	---	---	---	---	---	---	7.9	0.0	2.9	15.0	1.1	6.5
3	---	---	---	---	---	---	9.8	0.0	3.6	20.5	0.0	7.9
4	---	---	---	---	---	---	11.4	0.0	5.1	21.3	0.0	8.2
5	---	---	---	---	---	---	10.3	0.0	4.4	21.1	0.1	9.3
6	---	---	---	---	---	---	8.4	0.0	3.7	23.9	0.0	8.8
7	---	---	---	---	---	---	8.6	0.0	3.5	20.5	0.2	9.1
8	---	---	---	---	---	---	12.5	0.0	4.7	17.2	1.4	7.6
9	---	---	---	---	---	---	14.5	0.1	6.6	19.9	0.0	7.7
10	---	---	---	---	---	---	14.0	2.2	6.8	17.0	0.0	7.9
11	---	---	---	---	---	---	15.3	0.7	7.3	20.5	1.3	9.4
12	---	---	---	---	---	---	12.0	0.8	6.2	15.8	2.7	7.7
13	---	---	---	---	---	---	17.6	1.2	8.0	22.9	1.4	10.6
14	---	---	---	---	---	---	17.8	2.5	9.1	16.9	1.0	8.8
15	---	---	---	---	---	---	17.3	4.0	8.8	17.1	0.3	8.4
16	---	---	---	---	---	---	14.8	1.5	6.7	15.1	1.0	7.9
17	---	---	---	---	---	---	14.5	0.5	6.3	23.0	3.6	11.2
18	---	---	---	---	---	---	17.9	0.3	7.4	23.5	4.0	12.4
19	---	---	---	---	---	---	14.1	0.2	5.1	18.7	2.8	9.8
20	---	---	---	---	---	---	9.6	0.3	3.3	21.2	2.9	10.1
21	---	---	---	---	---	---	13.3	0.2	4.2	15.6	3.1	8.9
22	---	---	---	---	---	---	17.0	0.2	5.8	20.4	0.0	8.4
23	---	---	---	---	---	---	18.6	0.0	6.6	13.2	0.0	5.3
24	---	---	---	---	---	---	19.7	0.0	8.0	15.4	2.4	7.0
25	---	---	---	---	---	---	16.8	0.0	6.7	21.9	0.0	9.8
26	---	---	---	---	---	---	16.2	0.5	7.5	18.3	0.9	9.1
27	---	---	---	---	---	---	17.4	0.5	7.2	22.0	2.8	10.6
28	---	---	---	---	---	---	19.8	0.0	7.7	20.8	2.2	10.9
29	---	---	---	---	---	---	20.3	0.0	8.1	22.1	3.0	11.3
30	---	---	---	---	---	---	21.1	0.0	8.6	26.6	3.5	13.6
31	---	---	---	---	---	---	---	---	---	23.9	5.4	13.9
MONTH	---	---	---	---	---	---	21.1	0.0	6.1	26.6	0.0	9.2

ARKANSAS RIVER BASIN

07093740 BADGER CREEK, UPPER STATION, NEAR HOWARD, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	JANUARY			FEBRUARY			MARCH		
1	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	APRIL			MAY			JUNE		
1	e0.86	---	e0.74	0.15	35	0.01	0.21	56	0.03
2	e1.2	---	e1.1	0.18	37	0.02	0.18	---	e0.03
3	e1.0	---	e0.78	0.17	---	e0.02	0.14	48	0.02
4	e0.80	---	e0.69	0.14	45	0.02	0.19	64	0.03
5	e0.50	---	e0.25	0.16	34	0.01	0.38	97	0.10
6	e0.37	---	e0.17	0.10	40	0.01	0.29	89	0.07
7	e0.27	---	e0.12	0.15	39	0.02	0.18	---	e0.05
8	e0.25	---	e0.11	0.14	---	e0.01	0.13	90	0.03
9	e0.18	---	e0.07	0.12	29	0.00	0.08	60	0.01
10	e0.16	---	e0.06	0.13	24	0.00	0.05	42	0.00
11	e0.15	---	e0.05	0.14	28	0.01	0.04	28	0.00
12	e0.15	---	e0.05	0.14	31	0.01	0.04	---	e0.00
13	e0.15	---	e0.06	0.18	---	e0.02	0.04	45	0.00
14	e0.15	---	e0.05	0.14	31	0.01	0.04	48	0.00
15	e0.15	---	e0.04	0.17	44	0.02	0.06	47	0.00
16	e0.15	---	e0.04	0.15	36	0.01	0.07	42	0.00
17	e0.15	---	e0.03	0.14	34	0.01	0.05	---	e0.00
18	e0.15	---	e0.03	0.10	---	e0.01	0.05	58	0.00
19	e0.20	---	e0.02	0.12	52	0.02	0.04	50	0.00
20	e0.20	---	e0.02	0.18	40	0.02	0.06	89	0.01
21	e0.20	---	e0.01	0.23	39	0.02	0.06	90	0.01
22	e0.20	---	e0.01	0.15	33	0.01	0.07	---	e0.02
23	0.26	---	e0.03	0.18	---	e0.02	0.06	129	0.02
24	0.22	49	0.03	0.31	43	0.04	0.05	106	0.01
25	0.18	---	e0.02	0.29	42	0.03	0.05	100	0.01
26	0.22	49	0.03	0.22	34	0.02	0.06	146	0.02
27	0.22	45	0.03	0.22	59	0.04	0.10	---	e0.04
28	0.15	---	e0.02	0.23	---	e0.04	0.30	163	0.13
29	0.14	43	0.02	0.21	61	0.03	0.34	155	0.14
30	0.14	40	0.02	0.20	39	0.02	0.18	190	0.09
31	---	---	---	0.16	43	0.02	---	---	---
TOTAL	9.12	---	4.70	5.30	---	0.55	3.59	---	0.87

e Estimated.

07093740 BADGER CREEK, UPPER STATION, NEAR HOWARD, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT
	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)
	JULY			AUGUST			SEPTEMBER		
1	0.12	235	0.07	0.08	---	e0.02	0.06	45	0.00
2	0.08	---	e0.04	0.06	96	0.02	0.06	39	0.00
3	0.09	167	0.04	0.07	103	0.02	0.07	36	0.00
4	0.16	164	0.07	0.15	99	0.04	0.06	58	0.00
5	0.27	214	0.16	0.17	117	0.05	0.06	---	e0.00
6	23	1040	380	0.13	---	e0.04	0.06	37	0.00
7	13	860	51.0	0.10	99	0.03	0.07	34	0.00
8	0.48	167	0.23	0.11	85	0.03	0.07	37	0.00
9	0.35	---	e0.14	0.10	83	0.02	0.08	51	0.01
10	0.37	154	0.15	0.08	103	0.02	0.18	---	e0.02
11	0.34	164	0.15	0.06	---	e0.02	0.11	41	0.01
12	0.27	---	e0.11	0.05	89	0.01	0.10	44	0.01
13	0.19	146	0.08	0.05	75	0.01	0.11	35	0.01
14	0.15	132	0.06	0.06	52	0.00	0.10	34	0.00
15	0.19	114	0.06	0.05	73	0.00	0.10	---	e0.00
16	0.16	130	0.06	0.05	---	e0.01	0.10	45	0.01
17	0.12	---	e0.04	0.05	76	0.00	0.09	56	0.01
18	0.09	116	0.03	0.05	56	0.00	0.10	33	0.00
19	0.07	104	0.02	0.05	54	0.00	0.11	---	e0.01
20	0.06	107	0.02	0.06	70	0.01	0.11	---	e0.02
21	0.07	121	0.02	0.06	---	e0.01	0.08	71	0.02
22	0.10	---	e0.04	0.06	56	0.00	0.07	---	e0.01
23	0.14	142	0.05	0.07	48	0.00	0.07	30	0.00
24	0.33	204	0.19	0.06	53	0.00	0.07	33	0.00
25	0.20	220	0.12	0.06	74	0.01	0.08	---	e0.00
26	0.16	236	0.10	0.06	---	e0.01	0.08	55	0.01
27	0.11	---	e0.06	0.06	58	0.00	0.09	45	0.01
28	0.08	156	0.03	0.07	44	0.00	0.09	40	0.01
29	0.06	111	0.02	0.07	41	0.00	0.11	65	0.02
30	0.06	112	0.02	0.06	61	0.01	0.11	---	e0.02
31	0.07	114	0.02	0.06	---	e0.00	---	---	---
TOTAL	40.94	---	433.20	2.27	---	0.39	2.65	---	0.21

e Estimated.

07093775 BADGER CREEK, LOWER STATION, NEAR HOWARD, CO

LOCATION.--Lat 38°28'02", long 105°51'34", in SW¹/₄SW¹/₄ sec.27, T.49 N., R.10 E., Fremont County, Hydrologic Unit 11020001, on left bank 660 ft upstream from Denver and Rio Grande Railroad bridge, 960 ft upstream from mouth, and 1.9 mi northwest of Howard.

DRAINAGE AREA.--211 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1980 to September 1996, October 1996 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,780 ft above sea level, from topographic map. Prior to May 19, 1983, at site 360 ft downstream at datum 5.07 ft lower.

REMARKS.--No estimated daily discharges. Records fair. Natural flow of stream may be affected by erosion-control and livestock-watering reservoirs.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,900 ft³/s, July 8, 1996, from slope-area measurement of peak flow, gage height, 10.73 ft, from floodmarks; minimum daily, 0.56 ft³/s, Feb. 4-5, 1982.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 26 ft³/s, July 7, gage height, 4.23 ft; minimum daily, 2.5 ft³/s, Aug. 11-12, 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	---	---	---	---	---	7.7	5.4	4.6	4.5	2.8	2.9
2	4.3	---	---	---	---	---	8.0	5.6	4.5	4.5	2.8	3.0
3	4.2	---	---	---	---	---	7.9	5.5	4.4	4.7	2.9	3.1
4	4.0	---	---	---	---	---	8.0	5.3	5.0	5.0	3.1	3.1
5	4.3	---	---	---	---	---	8.0	5.3	5.1	6.6	3.0	3.1
6	4.5	---	---	---	---	---	8.0	5.5	4.8	6.1	2.9	3.0
7	4.8	---	---	---	---	---	8.1	5.7	4.6	10	3.0	3.0
8	4.8	---	---	---	---	---	7.9	5.8	4.5	4.8	3.0	3.2
9	4.7	---	---	---	---	---	7.9	5.9	4.3	4.6	2.8	3.5
10	4.6	---	---	---	---	---	7.9	5.6	4.3	4.6	2.7	5.3
11	4.7	---	---	---	---	---	8.1	5.5	4.3	4.3	2.5	4.4
12	4.8	---	---	---	---	---	8.1	5.8	4.2	4.0	2.5	4.1
13	4.8	---	---	---	---	---	8.0	5.8	4.2	3.7	2.7	4.0
14	4.6	---	---	---	---	---	7.9	5.5	4.4	3.8	2.7	3.9
15	4.6	---	---	---	---	---	7.9	5.5	4.4	3.9	2.5	3.7
16	4.9	---	---	---	---	---	7.9	5.5	4.4	3.7	2.6	3.5
17	4.9	---	---	---	---	---	7.6	5.3	4.3	3.5	2.6	3.5
18	4.9	---	---	---	---	---	7.4	5.2	4.2	3.5	2.7	4.2
19	4.9	---	---	---	---	---	7.3	5.1	4.1	3.3	2.7	4.9
20	4.9	---	---	---	---	---	7.3	5.3	4.2	3.4	2.9	4.2
21	5.0	---	---	---	---	---	7.1	5.3	4.3	3.8	3.1	3.9
22	5.1	---	---	---	---	---	6.9	5.2	4.5	3.5	3.0	3.8
23	5.0	---	---	---	---	---	6.8	5.3	4.3	3.5	3.0	3.8
24	4.8	---	---	---	---	---	6.6	5.5	4.3	3.6	3.0	3.8
25	4.8	---	---	---	---	---	6.6	5.3	4.4	3.5	2.9	3.8
26	4.8	---	---	---	---	---	6.7	5.1	4.5	3.4	2.8	4.0
27	4.7	---	---	---	---	---	6.5	5.1	4.7	3.2	3.0	4.2
28	4.8	---	---	---	---	---	6.4	5.1	4.8	3.2	3.1	4.2
29	4.8	---	---	---	---	---	6.1	5.0	4.7	3.0	3.2	4.2
30	4.8	---	---	---	---	---	5.8	4.9	4.6	2.9	3.2	4.2
31	5.0	---	---	---	---	---	---	4.6	---	2.8	3.0	---
TOTAL	146.1	---	---	---	---	---	222.4	166.5	133.9	128.9	88.7	113.5
MEAN	4.713	---	---	---	---	---	7.413	5.371	4.463	4.158	2.861	3.783
MAX	5.1	---	---	---	---	---	8.1	5.9	5.1	10	3.2	5.3
MIN	4.0	---	---	---	---	---	5.8	4.6	4.1	2.8	2.5	2.9
AC-FT	290	---	---	---	---	---	441	330	266	256	176	225

ARKANSAS RIVER BASIN

07093775 BADGER CREEK, LOWER STATION, NEAR HOWARD, CO--Continued

WATER TEMPERATURE (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	17.0	3.6	8.1	19.4	4.1	9.9
2	---	---	---	---	---	---	13.8	2.7	6.1	16.4	5.5	9.0
3	---	---	---	---	---	---	13.1	1.4	6.1	19.5	3.7	10.0
4	---	---	---	---	---	---	17.5	2.2	7.9	18.8	4.0	9.8
5	---	---	---	---	---	---	15.5	2.4	7.7	19.7	4.7	10.6
6	---	---	---	---	---	---	13.0	3.3	7.3	21.3	4.3	10.7
7	---	---	---	---	---	---	10.2	3.9	6.7	20.8	5.4	11.3
8	---	---	---	---	---	---	16.6	2.4	7.7	15.8	5.6	9.0
9	---	---	---	---	---	---	16.8	3.6	8.8	19.3	4.6	9.8
10	---	---	---	---	---	---	13.7	4.5	8.0	17.4	4.7	9.5
11	---	---	---	---	---	---	18.0	4.7	9.5	20.0	5.4	11.1
12	---	---	---	---	---	---	13.2	3.6	7.9	18.0	6.8	10.3
13	---	---	---	---	---	---	19.0	4.0	9.9	20.6	4.9	11.3
14	---	---	---	---	---	---	19.2	4.7	10.5	17.9	5.8	10.9
15	---	---	---	---	---	---	14.8	6.1	9.5	19.0	5.8	11.5
16	---	---	---	---	---	---	16.3	5.3	8.9	15.4	6.3	10.2
17	---	---	---	---	---	---	17.4	4.4	8.8	21.4	8.3	12.8
18	---	---	---	---	---	---	17.9	3.9	9.1	23.2	7.8	13.7
19	---	---	---	---	---	---	15.7	3.5	7.7	19.8	7.4	11.9
20	---	---	---	---	---	---	12.5	3.7	6.3	20.6	7.5	12.3
21	---	---	---	---	---	---	14.3	2.2	6.7	19.6	7.0	12.2
22	---	---	---	---	---	---	17.3	1.8	8.0	20.4	4.2	10.6
23	---	---	---	---	---	---	18.5	2.9	9.0	14.7	4.6	8.9
24	---	---	---	---	---	---	19.4	3.9	10	17.7	7.2	10.2
25	---	---	---	---	---	---	16.6	3.9	8.8	21.7	4.6	11.5
26	---	---	---	---	---	---	16.4	5.5	9.4	18.3	5.8	11.4
27	---	---	---	---	---	---	17.5	4.8	9.5	22.0	7.0	12.6
28	---	---	---	---	---	---	18.9	3.8	9.7	21.2	6.6	12.7
29	---	---	---	---	---	---	18.9	4.7	10.0	21.7	7.1	12.8
30	---	---	---	---	---	---	20.2	4.3	10.5	25.9	7.7	14.8
31	---	---	---	---	---	---	---	---	---	24.2	9.1	15.0
MONTH	---	---	---	---	---	---	20.2	1.4	8.5	25.9	3.7	11.2
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	21.2	9.6	13.9	27.9	10.7	17.1	23.3	13.6	16.8	23.8	11.1	15.8
2	24.5	8.9	15.0	27.2	11.4	16.3	24.8	11.7	16.7	25.4	9.7	15.7
3	20.0	7.5	12.7	24.1	11.4	16.1	25.2	14.5	17.7	22.7	11.0	15.4
4	16.9	9.8	11.5	26.5	11.4	16.4	24.8	13.6	17.9	20.9	11.7	14.8
5	24.8	7.5	14.4	21.8	10.9	15.4	27.1	14.3	18.9	25.0	9.2	15.3
6	25.0	8.3	15.4	24.4	12.7	16.8	28.2	13.1	17.9	23.2	10.2	15.4
7	25.3	9.0	15.4	22.1	11.2	16.3	25.7	13.0	17.4	20.7	12.0	15.6
8	24.8	8.9	15.1	27.6	12.5	18.5	23.8	12.3	16.6	22.2	12.7	16.3
9	26.2	9.7	15.8	24.3	13.0	16.6	26.9	10.7	17.0	20.9	13.0	15.6
10	24.5	9.6	15.0	27.8	12.1	17.3	27.7	11.5	17.6	14.4	12.4	13.2
11	25.8	8.6	15.4	27.6	11.2	17.5	27.7	10.2	17.0	16.8	12.0	13.8
12	25.4	8.9	15.6	28.2	12.1	18.2	26.7	9.8	16.5	19.8	10.8	14.4
13	25.9	9.9	16.2	27.4	10.6	17.4	24.0	11.7	16.2	23.7	10.0	14.5
14	24.4	12.3	16.6	27.4	12.1	16.9	27.3	9.9	16.5	19.7	9.9	13.5
15	24.2	10.7	15.6	26.5	11.0	17.2	27.4	9.7	16.7	23.6	8.1	13.9
16	24.7	11.2	16.2	27.3	10.7	17.6	27.1	11.0	17.4	23.1	8.2	13.7
17	23.6	9.6	15.8	27.6	11.7	18.0	25.3	10.4	16.0	21.9	9.3	13.5
18	26.4	8.8	16.0	28.2	11.1	17.9	22.6	10.2	15.5	18.0	9.6	12.1
19	25.9	9.0	15.8	28.4	11.4	18.4	26.5	11.2	16.7	21.4	7.8	12.7
20	25.9	13.0	17.2	28.5	12.8	18.1	23.9	12.5	16.4	22.4	7.2	12.9
21	26.5	11.3	16.8	28.5	13.9	19.2	24.2	12.3	16.3	22.1	7.6	13.0
22	25.5	12.5	17.5	24.7	13.8	18.0	21.6	10.7	15.0	22.6	8.7	13.7
23	26.2	10.8	16.4	29.2	13.4	18.1	22.1	10.1	14.8	21.0	7.8	12.6
24	26.0	10.2	16.5	28.0	12.1	18.4	26.1	9.9	16.3	21.4	7.2	12.5
25	22.8	11.0	15.9	25.9	12.8	17.2	27.1	12.5	17.8	20.0	7.1	11.9
26	24.6	10.6	15.3	28.2	12.5	18.3	27.0	10.6	16.9	20.5	9.8	12.9
27	26.4	9.8	15.3	25.9	11.7	17.7	24.4	14.0	17.0	16.7	7.1	10.6
28	25.1	10.3	15.2	25.4	11.7	17.6	22.6	13.2	16.4	18.9	8.2	11.8
29	24.0	9.8	16.1	29.0	10.9	18.1	23.3	11.8	15.1	18.5	7.7	11.0
30	26.1	9.9	16.5	26.5	12.1	17.8	25.1	9.2	15.3	20.5	7.8	11.8
31	---	---	---	30.0	11.8	19.0	23.7	10.2	15.9	---	---	---
MONTH	26.5	7.5	15.5	30.0	10.6	17.5	28.2	9.2	16.7	25.4	7.1	13.7

07094500 ARKANSAS RIVER AT PARKDALE, CO

LOCATION.--Lat 38°29'14", long 105°22'23", in NE¹/₄NW¹/₄ sec.18, T.18 S., R.71 W., Fremont County, Hydrologic Unit 11020001, on left bank at Parkdale, 100 ft upstream from Bumback Gulch, 300 ft upstream from bridge on U.S. Highway 50, and 0.9 mi upstream from Copper Gulch.

DRAINAGE AREA.--2,548 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1945 to September 1955, October 1964 to September 1994, April 1995 to current year (seasonal records only). Monthly discharge only for October 1945 to May 1946, published in WSP 1311.

REVISED RECORDS.--WSP 1117: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,720 ft above sea level, from topographic map. Prior to Oct. 1, 1964, at site 600 ft downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transbasin and transmountain diversions, storage reservoirs, power development, ground-water withdrawals, diversions for irrigation and municipal use, return flows from irrigated areas, and flows from sewage-treatment plants.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge (occurred during period of seasonal record), 6,830 ft³/s, June 18, 1995, gage height, 8.82 ft, from rating curve extended above 6,050 ft³/s; maximum gage height, 9.13 ft, June 9, 1985; minimum daily discharge (occurred during period of seasonal record), 187 ft³/s, Sept. 17, 2002.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 651 ft³/s, May 23, gage height, 3.20 ft; minimum daily, 187 ft³/s, Sept. 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	341	256	564	357	250	260
2	---	---	---	---	---	---	341	304	579	348	254	255
3	---	---	---	---	---	---	347	382	570	329	254	256
4	---	---	---	---	---	---	316	391	551	311	259	258
5	---	---	---	---	---	---	308	387	541	334	279	268
6	---	---	---	---	---	---	330	395	494	366	266	244
7	---	---	---	---	---	---	325	427	450	342	255	220
8	---	---	---	---	---	---	298	472	451	323	272	219
9	---	---	---	---	---	---	272	499	467	286	274	224
10	---	---	---	---	---	---	274	437	471	254	262	289
11	---	---	---	---	---	---	301	333	449	240	250	287
12	---	---	---	---	---	---	308	253	434	238	243	245
13	---	---	---	---	---	---	295	250	419	228	236	239
14	---	---	---	---	---	---	273	258	405	247	252	237
15	---	---	---	---	---	---	263	278	451	253	280	223
16	---	---	---	---	---	---	265	368	460	254	283	204
17	---	---	---	---	---	---	261	504	455	265	278	187
18	---	---	---	---	---	---	244	511	438	273	280	189
19	---	---	---	---	---	---	260	508	434	278	281	232
20	---	---	---	---	---	---	301	515	417	286	292	236
21	---	---	---	---	---	---	297	602	357	289	270	228
22	---	---	---	---	---	---	272	511	358	302	290	211
23	---	---	---	---	---	---	248	574	404	e326	291	207
24	---	---	---	---	---	---	249	588	413	e366	286	201
25	---	---	---	---	---	---	286	462	402	e346	281	202
26	---	---	---	---	---	---	363	382	371	e330	275	207
27	---	---	---	---	---	---	380	355	388	e320	271	217
28	---	---	---	---	---	---	350	337	362	e310	278	239
29	---	---	---	---	---	---	333	334	370	300	281	230
30	---	---	---	---	---	---	300	368	366	287	281	221
31	---	---	---	---	---	---	---	447	---	263	271	---
TOTAL	---	---	---	---	---	---	9001	12688	13291	9251	8375	6935
MEAN	---	---	---	---	---	---	300.0	409.3	443.0	298.4	270.2	231.2
MAX	---	---	---	---	---	---	380	602	579	366	292	289
MIN	---	---	---	---	---	---	244	250	357	228	236	187
AC-FT	---	---	---	---	---	---	17850	25170	26360	18350	16610	13760

e Estimated.

ARKANSAS RIVER BASIN

07094500 ARKANSAS RIVER AT PARKDALE, CO--Continued

WATER TEMPERATURE (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	13.2	10.0	11.5	16.8	12.3	14.1
2	---	---	---	---	---	---	11.3	6.9	8.5	15.7	10.6	13.0
3	---	---	---	---	---	---	10.3	5.7	7.9	15.3	10.8	13.2
4	---	---	---	---	---	---	11.6	6.2	9.1	15.9	11.7	13.8
5	---	---	---	---	---	---	12.2	8.2	10.6	16.4	11.8	14.1
6	---	---	---	---	---	---	12.0	9.9	11.1	17.2	12.3	14.8
7	---	---	---	---	---	---	11.5	10.0	10.8	17.5	13.5	15.6
8	---	---	---	---	---	---	13.5	8.5	10.8	15.9	12.2	14.1
9	---	---	---	---	---	---	15.6	10.0	12.7	14.2	9.9	12.2
10	---	---	---	---	---	---	14.6	11.3	12.7	15.3	11.1	13.3
11	---	---	---	---	---	---	15.1	10.5	12.6	16.5	11.5	14.0
12	---	---	---	---	---	---	13.5	10.9	12.2	14.6	12.0	13.2
13	---	---	---	---	---	---	15.7	10.0	12.8	17.0	11.5	14.2
14	---	---	---	---	---	---	17.2	12.3	14.7	16.9	13.0	14.6
15	---	---	---	---	---	---	17.7	13.5	15.5	17.5	12.5	14.9
16	---	---	---	---	---	---	15.1	11.7	13.5	16.6	14.1	15.2
17	---	---	---	---	---	---	15.2	9.6	12.3	15.1	12.4	13.6
18	---	---	---	---	---	---	15.3	9.8	12.5	17.4	13.7	15.7
19	---	---	---	---	---	---	13.1	9.4	11.0	17.8	15.2	16.7
20	---	---	---	---	---	---	9.5	6.9	7.9	16.7	14.2	15.6
21	---	---	---	---	---	---	11.2	5.4	8.3	15.6	13.3	14.7
22	---	---	---	---	---	---	13.4	7.8	10.5	16.1	11.7	13.8
23	---	---	---	---	---	---	15.0	9.0	11.9	14.5	11.7	13.2
24	---	---	---	---	---	---	15.5	10.6	12.8	12.3	9.5	11.0
25	---	---	---	---	---	---	14.1	10.0	12.0	15.6	10.7	13.2
26	---	---	---	---	---	---	14.0	9.6	12.1	16.3	12.4	14.6
27	---	---	---	---	---	---	15.0	11.7	13.1	17.4	13.7	15.5
28	---	---	---	---	---	---	15.3	10.7	13.1	18.1	14.0	16.2
29	---	---	---	---	---	---	15.6	11.8	13.7	17.8	14.5	16.4
30	---	---	---	---	---	---	16.7	11.3	14.0	20.9	15.5	18.2
31	---	---	---	---	---	---	---	---	---	20.8	17.0	19.1
MONTH	---	---	---	---	---	---	17.7	5.4	11.7	20.9	9.5	14.6
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	19.7	17.4	18.5	22.2	17.8	19.9	23.4	19.1	21.1	20.3	17.4	18.8
2	20.2	16.2	18.1	22.7	18.7	20.4	21.4	17.1	19.1	21.2	16.3	18.5
3	19.0	16.1	17.6	21.8	18.3	19.9	21.9	18.5	19.9	20.3	17.1	18.6
4	17.5	14.7	15.7	22.8	18.0	19.9	23.4	19.2	20.6	19.7	16.9	18.2
5	18.5	13.1	15.9	22.9	17.7	20.1	25.4	19.4	21.4	20.3	15.2	17.8
6	20.2	15.5	18.0	21.9	18.5	20.0	24.2	18.9	21.2	19.9	16.3	18.1
7	22.1	16.9	19.4	23.8	18.7	21.0	23.0	18.8	20.7	20.5	16.3	18.4
8	21.4	17.3	19.4	25.2	19.1	22.2	23.5	18.5	20.6	21.7	17.3	19.3
9	21.2	17.1	19.1	25.9	20.6	22.4	23.1	17.7	20.3	21.3	17.9	18.9
10	20.7	17.1	18.9	25.3	18.8	21.3	24.2	18.5	21.2	18.0	15.9	17.0
11	21.2	17.4	19.3	25.1	18.8	21.7	24.8	19.0	21.6	17.7	14.9	16.2
12	22.4	18.2	20.1	26.4	19.7	22.9	22.6	17.7	19.9	18.3	15.2	16.7
13	21.7	18.0	19.6	24.9	19.1	22.0	21.4	16.8	18.8	18.9	15.2	16.6
14	22.3	17.8	19.8	25.2	19.2	21.8	22.4	16.6	19.3	18.0	14.9	16.4
15	20.3	18.2	18.9	24.9	18.8	21.5	22.0	17.2	19.5	19.1	14.9	16.8
16	20.6	17.3	18.9	25.0	18.9	21.8	23.0	17.6	20.1	19.3	14.1	16.6
17	21.1	17.2	19.0	25.1	18.9	21.9	22.0	18.2	19.7	19.4	14.7	16.8
18	22.0	16.7	19.5	24.8	18.7	21.5	19.6	16.5	18.2	17.6	14.1	15.3
19	21.7	17.7	19.8	25.1	18.9	21.8	21.7	16.8	19.0	16.3	12.7	14.4
20	21.7	18.1	19.7	25.5	19.4	22.1	21.7	18.5	19.8	17.7	12.7	15.0
21	22.7	18.0	20.0	25.4	19.7	22.3	21.6	17.7	19.4	18.1	13.3	15.5
22	23.5	18.4	20.9	24.5	20.2	22.1	20.3	17.6	18.8	18.0	13.1	15.4
23	22.5	18.5	20.2	23.8	19.4	21.3	19.4	16.4	17.9	17.7	13.4	15.3
24	21.0	17.7	19.4	24.7	19.0	21.9	21.5	16.6	18.9	17.6	12.6	15.0
25	20.7	17.9	19.1	23.6	20.2	21.8	23.8	18.6	20.7	16.7	12.7	14.6
26	20.9	17.6	19.0	23.9	19.0	21.1	23.4	18.4	20.7	16.4	12.9	14.4
27	21.3	16.7	18.8	22.5	19.4	20.6	20.9	18.6	19.5	15.8	12.6	14.0
28	22.4	17.2	19.3	23.7	18.6	20.8	21.5	18.3	19.5	16.8	12.2	14.1
29	20.9	17.4	19.4	24.5	19.1	21.8	21.6	17.5	18.9	16.6	12.4	14.2
30	21.4	17.9	19.7	24.2	19.5	21.7	19.9	15.7	17.8	16.3	11.7	14.0
31	---	---	---	24.7	19.1	21.8	21.4	16.4	18.8	---	---	---
MONTH	23.5	13.1	19.0	26.4	17.7	21.4	25.4	15.7	19.8	21.7	11.7	16.4

07096000 ARKANSAS RIVER AT CANON CITY, CO

LOCATION.--Lat 38°26'02", long 105°15'24", in SE¹/₄SE¹/₄ sec.31, T.18 S., R.70 W., Fremont County, Hydrologic Unit 11020002, on right bank 800 ft upstream from Sand Creek, 0.7 mi downstream from Grape Creek, and 0.7 mi upstream from First Street Bridge at Canon City.

DRAINAGE AREA.--3,117 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1888 to current year. Monthly discharge only for some periods, published in WSP 1311. Published as "near Canyon" 1900-1906.

REVISED RECORDS.--WSP 1117: Drainage area. WSP 1311: 1897-98.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 5,342.13 ft above sea level. See WSP 1711 or 1731 for history of changes prior to Oct. 1, 1957. Oct. 1, 1957 to Nov. 15, 1962, water-stage recorder at present site at datum 1.49 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, power developments, transbasin and transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	219	307	e420	e420	e360	e320	295	160	385	250	156	160
2	217	313	424	e400	373	e325	297	181	407	245	156	156
3	214	318	435	e395	374	e330	302	261	401	219	157	156
4	213	315	438	e400	375	342	279	264	386	214	157	157
5	213	297	435	e410	385	354	268	275	380	238	167	159
6	212	292	436	e395	375	333	284	281	333	261	169	158
7	211	294	432	e405	377	326	280	297	294	235	159	144
8	215	321	428	407	384	326	260	339	296	213	159	135
9	214	331	417	405	386	307	239	362	310	231	167	135
10	217	326	420	411	357	309	232	277	312	200	162	170
11	227	315	e420	398	373	316	255	190	296	183	159	198
12	236	312	427	389	399	318	235	158	284	168	155	161
13	235	315	416	398	380	329	216	155	265	181	152	151
14	235	319	404	375	380	354	205	155	254	167	152	152
15	228	317	410	e380	373	356	188	177	289	156	173	144
16	225	298	406	e400	335	337	182	247	298	151	177	130
17	226	283	396	e405	339	311	176	472	296	148	179	110
18	229	308	e415	e380	337	304	160	442	311	151	167	100
19	231	318	e420	e370	340	301	157	347	328	154	171	129
20	254	316	420	365	336	298	182	339	264	156	182	147
21	256	313	e430	373	343	301	200	440	220	156	174	142
22	261	325	e425	390	338	310	187	340	220	221	175	135
23	266	315	e420	e395	338	309	163	392	256	222	184	128
24	274	319	e400	e395	349	308	163	429	279	261	180	120
25	274	303	e385	e390	356	308	162	316	279	242	178	114
26	276	320	e390	406	e325	290	230	236	258	208	172	121
27	286	325	e405	422	e305	284	256	211	288	211	166	131
28	286	e355	e430	393	e295	283	240	196	273	211	172	142
29	292	e370	437	381	---	295	219	194	277	199	178	147
30	291	e400	e435	375	---	295	195	213	260	185	175	143
31	292	---	e420	e380	---	298	---	274	---	172	169	---
TOTAL	7525	9560	12996	12208	9987	9777	6707	8620	8999	6209	5199	4275
MEAN	243	319	419	394	357	315	224	278	300	200	168	142
MAX	292	400	438	422	399	356	302	472	407	261	184	198
MIN	211	283	385	365	295	283	157	155	220	148	152	100
AC-FT	14930	18960	25780	24210	19810	19390	13300	17100	17850	12320	10310	8480

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1889 - 2002, BY WATER YEAR (WY)

MEAN	372	378	372	349	345	354	423	1105	2268	1463	849	446
MAX	1195	620	623	609	781	711	1120	2667	4286	5541	2134	1411
(WY)	1912	1924	1983	1983	1985	1989	1942	1984	1980	1957	1957	1909
MIN	167	180	204	195	217	176	108	243	300	200	168	142
(WY)	1978	1940	1940	1979	1978	1904	1940	1977	2002	2002	2002	2002

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1889 - 2002
ANNUAL TOTAL	210316	102062	
ANNUAL MEAN	576	280	729
HIGHEST ANNUAL MEAN			1299
LOWEST ANNUAL MEAN			280
HIGHEST DAILY MEAN	2610	Jun 3	9480
LOWEST DAILY MEAN	210	Sep 29	69
ANNUAL SEVEN-DAY MINIMUM	213	Oct 3	127
MAXIMUM PEAK FLOW			496
MAXIMUM PEAK STAGE			5.79
ANNUAL RUNOFF (AC-FT)	417200	202400	528200
10 PERCENT EXCEEDS	1310	405	1700
50 PERCENT EXCEEDS	407	288	414
90 PERCENT EXCEEDS	252	156	240

- e Estimated.
- a Site and datum then in use, from rating curve extended above 5,000 ft³/s.
- b From floodmark.
- c Maximum gage height, 10.90 ft, Jun 18, 1995.
- d Maximum gage height, 5.88 ft, Mar 2.

07096000 ARKANSAS RIVER AT CANON CITY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1963 to September 1968, October 1970 to January 1977, April 1990 to March 1993, October 1993 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1993 to current year.
 WATER TEMPERATURE: October 1993 to current year.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry.

REMARKS.--Daily specific-conductance records are fair. Daily water-temperature records are good. Daily data that are not published are either missing or of unacceptable quality. Reported values are representative of the stream during steady flows based on a cross-section comparison made during the year at a flow of 316 ft³/s. Additional water-quality data were collected as part of a water-quality assessment of drought conditions and are published in the "Drought Synoptic Sampling" section of this report.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 739 microsiemens/cm, Aug. 16, 2000; minimum, 94 microsiemens/cm, June 9, 1996.
 WATER TEMPERATURE: Maximum, 25.7°C, July 12, 2002; minimum, 0.0°C, on many days.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 337 microsiemens/cm, July 22; minimum, 187 microsiemens/cm, May 24.
 WATER TEMPERATURE: Maximum, 25.7°C, July 12; minimum, 0.0 °C, on many days.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	324	311	318	307	300	303	246	238	242	245	220	235
2	319	313	316	304	300	302	242	238	239	245	239	242
3	319	315	317	304	296	300	247	240	244	253	237	244
4	318	315	317	301	295	298	244	240	242	247	234	240
5	317	314	316	302	295	299	248	242	245	243	231	236
6	320	316	318	303	297	301	248	242	245	244	227	236
7	324	319	322	305	300	303	252	241	245	237	229	233
8	325	321	323	306	295	299	249	237	243	229	226	228
9	323	317	320	306	298	302	249	233	241	234	227	231
10	322	316	319	305	299	302	248	235	244	242	233	238
11	324	319	322	307	299	302	245	237	242	242	237	240
12	322	319	320	309	301	306	246	238	242	243	236	240
13	324	320	322	307	299	303	251	241	246	245	242	244
14	326	321	323	304	299	302	253	244	248	247	238	242
15	325	318	323	305	297	300	252	243	249	247	240	245
16	323	317	320	300	293	297	255	245	250	249	239	246
17	324	319	321	306	300	303	261	248	253	249	236	244
18	322	315	319	308	302	305	258	245	251	246	236	242
19	320	314	318	304	287	296	257	251	255	249	238	243
20	321	312	317	288	280	283	259	247	253	250	240	245
21	314	307	311	284	277	281	254	248	251	249	240	245
22	315	309	312	286	271	278	254	246	250	243	233	238
23	315	309	312	287	275	281	260	252	255	238	233	235
24	315	308	312	286	277	282	266	255	259	241	234	238
25	315	309	312	290	279	284	269	255	261	240	234	238
26	314	311	312	291	279	285	268	254	261	237	231	235
27	316	309	312	283	271	277	260	235	247	235	229	231
28	312	305	309	284	274	279	237	228	233	238	228	232
29	311	304	307	279	257	267	236	227	230	239	233	236
30	309	299	304	257	246	251	238	226	231	244	235	239
31	308	300	304	---	---	---	238	230	234	249	243	246
MONTH	326	299	316	309	246	292	269	226	246	253	220	239

ARKANSAS RIVER BASIN

07096000 ARKANSAS RIVER AT CANON CITY, CO--Continued

WATER TEMPERATURE (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	17.4	14.0	15.6	10.1	8.2	9.0	0.4	0.0	0.0	0.0	0.0	0.0
2	16.7	13.6	15.0	9.3	7.5	8.3	0.9	0.0	0.4	0.0	0.0	0.0
3	16.1	13.2	14.6	9.0	7.2	8.0	3.1	0.7	2.0	0.0	0.0	0.0
4	15.8	13.1	14.4	8.9	7.0	7.9	3.1	1.8	2.5	0.1	0.0	0.0
5	13.8	11.1	12.0	9.0	7.1	8.0	3.2	1.8	2.6	0.0	0.0	0.0
6	13.1	9.6	11.4	9.0	7.0	8.0	2.0	1.2	1.6	0.0	0.0	0.0
7	13.4	10.7	11.8	9.4	7.5	8.5	2.3	1.2	1.7	0.6	0.0	0.1
8	14.4	11.7	12.9	8.7	7.8	8.3	1.2	0.0	0.4	0.7	0.0	0.3
9	13.6	11.3	12.5	8.4	6.5	7.5	0.0	0.0	0.0	1.1	0.1	0.6
10	11.3	8.8	9.8	7.0	5.2	6.2	0.2	0.0	0.0	2.7	1.1	2.0
11	9.3	6.9	8.4	6.3	4.7	5.4	0.5	0.0	0.1	2.0	0.7	1.3
12	9.7	7.6	8.5	6.9	5.3	6.0	0.5	0.0	0.1	1.4	0.4	0.9
13	10.3	7.2	8.5	7.2	6.0	6.6	0.0	0.0	0.0	2.0	0.5	1.3
14	10.6	7.6	9.1	8.0	6.4	7.0	0.2	0.0	0.0	0.5	0.0	0.1
15	10.3	8.4	9.2	7.8	6.7	7.2	0.4	0.0	0.0	0.0	0.0	0.0
16	10.1	7.3	8.5	7.5	6.3	6.9	0.1	0.0	0.0	0.0	0.0	0.0
17	10.1	7.8	9.0	8.1	6.6	7.2	0.1	0.0	0.0	0.0	0.0	0.0
18	10.8	8.3	9.3	7.4	5.7	6.6	0.4	0.0	0.1	0.0	0.0	0.0
19	10.8	7.8	9.2	6.3	5.1	5.7	0.0	0.0	0.0	0.0	0.0	0.0
20	10.0	7.9	9.0	5.1	3.4	4.5	0.1	0.0	0.0	0.0	0.0	0.0
21	9.2	7.7	8.6	3.7	2.6	3.1	0.3	0.0	0.0	0.0	0.0	0.0
22	10.8	8.3	9.5	4.6	2.7	3.7	0.6	0.0	0.1	0.5	0.0	0.0
23	10.8	8.6	9.7	5.0	3.7	4.6	0.0	0.0	0.0	0.0	0.0	0.0
24	9.7	7.4	8.5	3.7	2.3	3.1	0.0	0.0	0.0	0.0	0.0	0.0
25	7.6	5.7	6.6	2.9	2.0	2.4	0.0	0.0	0.0	0.1	0.0	0.0
26	7.2	4.8	6.0	2.2	0.8	1.6	0.0	0.0	0.0	0.5	0.0	0.0
27	7.9	5.3	6.6	1.0	0.0	0.5	0.0	0.0	0.0	0.7	0.0	0.2
28	9.2	7.2	8.1	0.0	0.0	0.0	0.2	0.0	0.0	2.3	0.1	1.2
29	10.1	8.1	8.9	0.0	0.0	0.0	0.2	0.0	0.0	2.4	0.3	1.5
30	10.2	8.3	9.2	0.2	0.0	0.0	0.2	0.0	0.0	0.3	0.0	0.0
31	11.0	9.0	9.8	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0
MONTH	17.4	4.8	10.0	10.1	0.0	5.4	3.2	0.0	0.4	2.7	0.0	0.3
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	0.0	0.0	0.0	1.8	0.0	0.4	13.2	9.6	11.1	16.9	12.1	14.1
2	0.0	0.0	0.0	0.0	0.0	0.0	10.9	5.4	8.0	14.8	11.2	12.9
3	0.0	0.0	0.0	0.0	0.0	0.0	9.7	5.2	7.1	15.6	11.5	13.3
4	0.1	0.0	0.0	0.3	0.0	0.0	11.1	6.0	8.4	16.0	12.0	13.9
5	0.4	0.0	0.0	1.2	0.0	0.3	12.0	7.7	9.9	16.9	11.9	14.3
6	0.1	0.0	0.0	3.1	0.0	1.5	12.0	9.0	10.6	17.5	12.4	14.9
7	0.5	0.0	0.0	6.4	2.6	4.6	12.8	9.5	10.8	18.3	13.7	15.8
8	0.9	0.0	0.2	6.0	3.1	5.0	13.4	8.4	10.7	15.6	12.4	14.4
9	0.0	0.0	0.0	4.0	1.0	2.6	15.0	9.8	12.3	14.3	10.0	12.3
10	0.1	0.0	0.0	5.9	2.1	4.0	13.6	10.9	12.5	15.5	11.1	13.2
11	0.4	0.0	0.0	8.1	4.6	6.1	15.3	10.3	12.6	16.7	12.0	14.1
12	0.8	0.0	0.1	9.1	5.6	7.2	13.2	11.2	12.1	14.9	11.4	12.9
13	0.8	0.0	0.0	9.8	6.4	8.0	15.8	10.0	12.6	17.0	10.8	13.8
14	1.0	0.0	0.2	9.8	5.8	7.9	17.4	11.8	14.4	15.5	12.4	14.0
15	1.5	0.0	0.5	5.8	3.7	4.6	18.3	13.4	15.5	16.9	12.6	14.8
16	2.4	0.2	1.3	5.1	2.9	4.0	15.5	12.3	13.8	16.7	14.0	15.3
17	3.4	1.3	2.4	4.4	1.8	3.2	15.3	10.0	12.5	14.1	12.1	13.0
18	5.2	2.6	4.0	4.8	2.2	3.4	15.4	10.1	12.6	18.0	12.9	15.2
19	5.2	3.4	4.4	8.7	4.0	6.0	12.9	9.7	11.2	17.9	14.9	16.5
20	5.0	3.0	4.0	9.1	4.4	6.6	9.7	6.7	8.1	17.6	14.8	16.1
21	5.5	3.6	4.3	6.9	4.0	5.3	11.4	5.8	8.3	16.7	14.0	15.3
22	5.0	2.8	3.9	6.9	2.8	4.9	13.4	7.4	10.4	16.5	11.5	13.9
23	5.2	2.8	4.2	8.3	4.4	6.5	15.2	9.1	12.0	15.2	12.3	13.6
24	6.2	4.2	4.9	8.0	5.0	6.6	15.0	10.7	12.6	12.3	9.9	11.1
25	4.8	0.6	3.0	5.1	3.5	4.5	13.6	10.4	12.0	15.7	10.8	13.1
26	1.1	0.0	0.2	9.4	3.5	6.3	13.4	10.4	12.0	16.6	12.5	14.7
27	1.5	0.0	0.5	11.2	5.9	8.4	15.4	11.2	13.2	18.1	13.9	15.7
28	2.8	0.0	1.5	12.1	7.0	9.4	16.2	10.9	13.3	18.8	14.5	16.5
29	---	---	---	11.7	7.7	9.6	15.6	11.7	13.7	18.9	14.7	16.9
30	---	---	---	11.8	7.5	9.5	16.7	11.5	13.9	21.3	15.9	18.5
31	---	---	---	12.7	8.4	10.4	---	---	---	21.4	17.8	19.6
MONTH	6.2	0.0	1.4	12.7	0.0	5.1	18.3	5.2	11.6	21.4	9.9	14.6

07096250 FOURMILE CREEK BELOW CRIPPLE CREEK NEAR VICTOR, CO

LOCATION.--Lat 38°39'52", long 105°13'37", in SW¹/₄SE¹/₄ sec.9, T.16 S., R.70 W., Teller County, Hydrologic Unit 11020002, on left bank 500 ft from Teller County Route 88, 0.2 mi downstream from Cripple Creek, and 5.5 mi southwest of Victor.

DRAINAGE AREA.--272 mi².

PERIOD OF RECORD.--October 1992 to current year.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 6,870 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records fair except for Nov. 15 to Mar. 6, which are poor. Natural flow of stream affected by small diversions for irrigation, flows from Cripple Creek sewage treatment plant, and releases from Wrights Reservoir. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.9	8.5	5.7	6.8	6.4	5.4	11	2.3	2.5	27	0.38	0.08
2	7.5	8.7	5.8	6.4	5.9	6.6	11	1.9	2.7	26	0.34	0.13
3	6.6	8.3	5.7	6.6	6.1	6.9	9.2	2.2	2.5	24	0.41	0.08
4	6.6	8.3	5.3	5.9	6.3	6.4	11	1.5	3.0	22	0.44	0.05
5	7.2	7.5	5.4	6.1	5.6	6.1	10	1.2	3.5	15	0.45	0.07
6	6.9	6.9	5.2	6.0	6.5	6.3	9.5	0.98	3.4	20	0.35	0.00
7	7.1	7.3	5.0	5.8	6.0	6.1	7.9	1.0	3.4	17	0.28	0.00
8	7.4	8.4	4.6	5.5	5.7	5.6	9.9	1.1	3.4	13	0.24	0.00
9	8.4	8.0	4.9	5.4	5.9	5.4	10	1.1	3.4	11	0.22	0.32
10	9.0	7.5	5.1	5.1	6.6	6.0	10	1.2	3.2	12	0.22	1.1
11	10	7.8	5.0	5.5	6.1	6.3	12	1.1	3.3	9.7	0.18	0.42
12	10	8.1	5.2	5.5	5.7	6.5	13	1.4	3.2	7.9	0.15	0.32
13	10	7.6	5.2	5.1	6.0	6.8	14	1.4	3.0	5.8	0.13	0.36
14	11	7.4	5.2	5.4	5.8	7.0	13	1.2	7.3	4.3	0.13	0.37
15	11	7.0	5.1	5.4	5.7	6.2	12	1.3	21	3.5	0.05	0.29
16	11	6.5	5.1	5.1	6.2	6.1	10	1.1	20	5.0	0.05	0.27
17	12	7.3	5.5	5.3	6.2	4.6	8.9	1.0	12	19	0.03	0.24
18	12	7.2	5.3	5.5	6.1	5.5	7.8	1.1	8.1	24	0.12	0.30
19	12	7.4	5.3	5.8	5.8	6.6	7.2	1.1	7.2	26	0.11	0.31
20	11	6.2	5.1	5.0	6.0	5.9	9.8	1.2	7.2	26	0.08	0.29
21	11	5.7	5.1	4.8	5.8	6.0	9.1	1.2	9.8	27	0.09	0.26
22	12	6.8	4.9	4.8	6.1	6.2	8.3	1.1	10	26	0.18	0.26
23	11	7.0	5.0	4.6	5.9	7.8	7.5	1.1	11	26	0.10	0.25
24	10	5.5	4.9	5.0	5.6	7.6	7.0	1.7	28	25	0.11	0.23
25	11	5.8	4.8	5.1	5.1	8.1	7.6	1.9	33	15	0.15	0.20
26	10	6.0	4.7	5.1	5.6	7.6	7.5	1.7	34	9.6	0.14	0.24
27	10	6.3	4.5	5.5	5.9	8.9	6.4	1.7	33	5.6	0.09	0.27
28	9.9	5.8	4.8	5.4	6.2	9.5	5.4	1.8	31	3.4	0.20	0.28
29	10	5.8	4.6	5.3	---	9.6	4.0	2.0	30	1.8	0.22	0.28
30	9.3	6.0	5.1	5.8	---	10	3.3	2.2	29	1.0	0.16	0.28
31	8.9	---	7.0	5.8	---	10	---	2.3	---	0.64	0.09	---
TOTAL	298.7	212.6	160.1	170.4	166.8	213.6	273.3	45.08	372.1	459.24	5.89	7.55
MEAN	9.635	7.087	5.165	5.497	5.957	6.890	9.110	1.454	12.40	14.81	0.190	0.252
MAX	12	8.7	7.0	6.8	6.6	10	14	2.3	34	27	0.45	1.1
MIN	6.6	5.5	4.5	4.6	5.1	4.6	3.3	0.98	2.5	0.64	0.03	0.00
AC-FT	592	422	318	338	331	424	542	89	738	911	12	15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2002, BY WATER YEAR (WY)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002		
MEAN	14.10	10.74	7.841	7.272	6.672	8.484	19.80	57.04	43.18	25.99	28.52	18.24
MAX	21.5	21.8	16.6	15.4	12.1	17.1	40.2	149	128	75.8	101	44.9
(WY)	2000	1995	1996	1996	2000	2000	1994	1994	1995	1995	1999	1998
MIN	5.84	5.42	3.54	4.55	3.79	3.56	9.16	1.44	11.8	11.2	0.17	0.25
(WY)	2001	2001	2001	1997	1995	1999	2002	2002	1996	1993	2002	2002

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1993 - 2002

ANNUAL TOTAL	4970.1	2385.36	
ANNUAL MEAN	13.62	6.535	20.74
HIGHEST ANNUAL MEAN			38.2
LOWEST ANNUAL MEAN			6.53
HIGHEST DAILY MEAN	58	Aug 5	34
LOWEST DAILY MEAN	2.4	Sep 26	0.00
ANNUAL SEVEN-DAY MINIMUM	3.6	Jan 9	0.05
MAXIMUM PEAK FLOW			41
MAXIMUM PEAK STAGE			3.91
ANNUAL RUNOFF (AC-FT)	9860	4730	15020
10 PERCENT EXCEEDS	30	12	47
50 PERCENT EXCEEDS	10	5.8	11
90 PERCENT EXCEEDS	4.9	0.25	4.5

a Also occurred Sept. 7-8, 2002.

b From rating curve extended above 187 ft³/s.

07097000 ARKANSAS RIVER AT PORTLAND, CO

LOCATION.--Lat 38°23'18", long 105°00'56", in NE¹/₄NE¹/₄ sec.20, T.19 S., R.68 W., Fremont County, Hydrologic Unit 11020002, on right bank at upstream side of bridge on State Highway 120 at Portland (revised), and 1 mi downstream from Hardscrabble Creek.

DRAINAGE AREA.--4,024 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1939 to September 1952, October 1974 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 5,021.59 ft above sea level. Prior to Oct. 1, 1974, at site 400 ft downstream at datum 0.03 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, power developments, transbasin and transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by U.S. Geological Survey.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 21, 1965, reached a discharge of 23,900 ft³/s, from rating curve extended above 7,400 ft³/s on basis of slope-area measurement of peak flow, gage height, 11.85 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	211	300	403	e372	e335	307	255	148	370	225	130	147
2	201	320	396	e365	354	e290	250	156	408	221	130	140
3	202	335	402	e370	352	e300	262	227	405	208	139	132
4	209	329	404	356	340	304	242	244	416	211	143	139
5	211	362	513	372	332	315	227	251	420	265	144	140
6	212	417	507	350	301	315	246	260	354	673	144	135
7	215	418	396	373	313	315	270	262	316	355	134	121
8	216	459	398	375	321	315	271	297	301	309	131	107
9	222	440	372	371	312	301	219	341	307	279	142	105
10	232	404	378	378	304	283	202	293	297	184	137	166
11	234	352	383	366	326	289	200	193	303	163	134	199
12	239	324	370	360	343	285	209	147	280	139	125	162
13	244	331	368	362	328	286	206	143	267	137	113	154
14	243	325	353	342	339	312	186	139	256	131	114	143
15	233	324	363	329	348	320	169	165	269	127	132	137
16	224	310	369	357	322	302	157	208	288	117	135	120
17	233	284	334	e350	321	276	158	427	284	119	138	102
18	228	303	346	e335	323	266	137	461	270	122	134	91
19	229	321	356	e325	316	266	127	338	301	125	145	109
20	247	322	354	328	326	256	146	311	262	122	151	139
21	271	313	378	336	331	244	173	452	217	132	147	140
22	269	323	378	324	327	254	169	337	215	194	144	134
23	277	323	360	337	324	260	141	367	231	179	144	128
24	293	321	352	e320	332	263	133	483	250	222	144	125
25	295	307	e350	e345	341	276	136	351	249	217	147	116
26	296	331	e360	364	318	259	185	267	236	189	141	125
27	310	337	e372	368	286	237	233	239	243	179	140	132
28	312	329	e381	360	278	231	219	219	249	191	e220	144
29	296	363	e377	343	---	236	199	202	259	185	e219	158
30	293	373	e371	330	---	241	187	212	236	165	162	142
31	303	---	e360	e335	---	253	---	247	---	158	154	---
TOTAL	7700	10300	11804	10898	9093	8657	5914	8387	8759	6243	4457	4032
MEAN	248	343	381	352	325	279	197	271	292	201	144	134
MAX	312	459	513	378	354	320	271	483	420	673	220	199
MIN	201	284	334	320	278	231	127	139	215	117	113	91
AC-FT	15270	20430	23410	21620	18040	17170	11730	16640	17370	12380	8840	8000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2002, BY WATER YEAR (WY)

MEAN	389	419	380	362	353	367	493	1184	2447	1551	926	443
MAX	1083	748	693	626	774	683	1869	2680	4429	4472	2380	1008
(WY)	1985	1985	1983	1983	1985	1989	1942	1984	1980	1995	1984	1982
MIN	136	191	212	199	162	147	135	245	292	201	144	134
(WY)	1978	1978	1978	1979	1978	1978	1981	1977	2002	2002	2002	2002

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1939 - 2002
ANNUAL TOTAL	221555	96244	
ANNUAL MEAN	607	264	782
HIGHEST ANNUAL MEAN			1387
LOWEST ANNUAL MEAN			264
HIGHEST DAILY MEAN	2900	Jun 3	7460
LOWEST DAILY MEAN	200	Sep 29	66
ANNUAL SEVEN-DAY MINIMUM	206	Sep 28	76
MAXIMUM PEAK FLOW			4110
MAXIMUM PEAK STAGE		6.16	Jul 6
ANNUAL RUNOFF (AC-FT)	439500	190900	566800
10 PERCENT EXCEEDS	1420	371	1860
50 PERCENT EXCEEDS	375	269	452
90 PERCENT EXCEEDS	255	136	225

e Estimated.

a From rating curve extended above 5,300 ft³/s.

ARKANSAS RIVER BASIN

07097000 ARKANSAS RIVER AT PORTLAND, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	425	385	404	449	389	424	487	457	470	662	604	637
2	434	387	407	---	---	---	485	447	464	661	584	613
3	443	387	408	---	---	---	462	430	449	632	482	524
4	438	403	417	---	---	---	481	440	456	526	448	470
5	424	395	409	474	426	444	491	462	479	497	459	473
6	441	401	418	430	403	416	491	455	479	485	440	460
7	430	404	415	441	403	418	1010	470	535	477	445	457
8	414	381	401	435	409	422	531	488	508	468	413	439
9	408	369	383	449	398	417	551	517	531	421	402	411
10	429	380	400	449	418	435	583	525	548	469	406	435
11	415	390	400	446	410	429	588	551	568	615	456	507
12	406	376	393	440	407	419	570	530	544	643	615	632
13	404	370	390	438	383	418	605	519	566	671	625	642
14	404	382	392	424	404	414	617	565	595	705	665	685
15	399	378	386	415	391	400	627	588	606	674	590	639
16	397	379	391	425	389	407	627	583	604	617	517	565
17	414	378	399	459	409	427	659	568	600	561	401	445
18	432	394	411	456	428	442	678	611	638	409	380	393
19	425	396	411	455	430	442	701	649	669	416	394	405
20	398	336	368	477	443	454	682	616	643	417	391	403
21	400	381	389	460	444	452	616	549	575	399	346	359
22	404	369	383	456	435	445	615	560	577	390	355	378
23	398	382	393	462	435	446	650	594	623	403	351	385
24	397	391	394	463	441	452	689	628	657	377	346	356
25	410	386	394	463	438	450	674	580	645	415	372	396
26	408	395	402	487	446	458	651	519	568	472	415	447
27	417	385	399	487	454	467	538	493	508	512	438	479
28	450	388	424	490	468	480	547	487	507	523	484	499
29	---	---	---	495	473	487	564	519	537	546	491	520
30	---	---	---	501	472	485	652	550	590	546	482	511
31	---	---	---	501	450	472	---	---	---	504	442	465
MONTH	450	336	399	---	---	---	1010	430	558	705	346	485
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	453	377	396	487	435	457	571	523	546	553	529	539
2	382	357	367	477	423	448	554	512	537	560	524	539
3	365	349	355	493	448	468	554	526	538	553	504	527
4	607	359	387	500	453	475	565	507	536	557	500	528
5	392	359	374	999	410	480	555	505	529	532	454	496
6	401	373	382	1100	480	594	551	497	524	533	453	500
7	407	395	401	496	450	476	555	476	524	551	465	516
8	417	402	409	---	---	---	556	510	526	584	511	551
9	414	383	397	508	420	466	534	490	510	607	528	567
10	400	383	391	605	508	548	533	489	510	601	495	561
11	404	376	391	618	481	566	543	503	521	563	469	499
12	416	387	403	640	570	606	584	499	547	559	492	522
13	437	397	415	570	533	553	593	542	569	636	531	573
14	440	399	423	558	477	531	581	527	561	614	535	559
15	443	405	421	583	473	532	552	502	524	572	537	554
16	420	392	403	558	479	526	524	499	511	620	525	584
17	407	378	389	563	461	529	524	498	511	643	603	626
18	412	383	399	571	479	539	568	505	535	667	584	631
19	390	370	380	603	501	558	552	494	525	689	584	630
20	416	384	407	612	511	569	532	480	506	596	530	563
21	484	411	444	611	527	574	541	489	519	600	505	565
22	486	438	461	681	495	548	551	479	525	588	534	564
23	485	441	462	583	538	561	531	472	496	632	513	577
24	448	409	430	549	482	509	522	477	502	632	549	594
25	441	417	432	---	---	---	527	483	508	628	588	615
26	465	427	444	---	---	---	534	482	507	627	570	602
27	465	427	442	---	---	---	543	500	522	613	544	591
28	492	422	450	---	---	---	1480	473	621	615	540	581
29	492	432	454	---	---	---	808	540	601	583	531	548
30	479	436	456	508	475	493	591	526	551	584	535	561
31	---	---	---	534	460	507	535	524	530	---	---	---
MONTH	607	349	412	---	---	---	1480	472	531	689	453	562

ARKANSAS RIVER BASIN

07097000 ARKANSAS RIVER AT PORTLAND, CO--Continued

WATER TEMPERATURE (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	20.3	14.4	17.3	13.1	8.9	10.9	3.6	0.0	1.6	1.0	0.0	0.2
2	19.8	14.3	17.1	12.2	7.7	10.0	4.0	0.8	2.3	0.3	0.0	0.0
3	19.3	14.1	16.9	11.8	7.6	9.7	4.5	1.3	2.8	0.5	0.0	0.1
4	18.4	13.5	16.0	12.0	7.5	9.7	6.1	1.8	3.8	1.3	0.0	0.5
5	15.3	12.3	13.4	12.3	7.8	10	5.3	2.7	3.9	2.9	0.0	1.2
6	15.8	9.9	13.0	12.0	8.2	10.0	4.9	1.5	3.1	2.6	0.0	1.0
7	15.6	11.3	13.3	12.3	8.4	10.4	4.2	1.5	2.9	4.6	0.0	2.2
8	17.7	12.0	14.9	10.6	8.5	9.4	3.5	0.2	1.8	5.0	1.8	3.3
9	16.0	11.5	13.9	10.9	7.2	8.9	3.3	0.0	1.4	4.5	1.6	3.1
10	14.0	9.5	11.7	9.9	6.5	8.0	3.3	0.2	1.6	4.9	2.5	3.5
11	12.6	8.4	10.7	9.5	5.1	7.3	2.9	0.0	1.3	5.4	1.8	3.4
12	12.8	9.4	11.0	10.3	5.6	8.0	2.6	0.2	1.2	4.7	0.6	2.7
13	13.3	7.9	10.7	9.1	6.8	8.0	1.9	0.0	0.7	4.4	1.9	2.9
14	13.8	8.2	11.2	10.5	7.3	8.8	2.3	0.0	0.9	3.8	0.1	1.8
15	12.8	8.3	10.7	10.4	7.1	8.7	2.8	0.2	1.3	2.0	0.0	0.7
16	13.3	7.5	10.5	10.3	6.3	8.3	2.9	0.2	1.4	1.4	0.0	0.5
17	13.5	8.4	11.1	10.8	7.2	8.6	3.2	0.0	1.4	2.1	0.0	0.7
18	13.3	9.0	11.2	9.4	5.6	7.8	3.4	0.2	1.7	1.6	0.0	0.5
19	13.2	7.7	10.7	9.1	6.1	7.4	2.3	0.0	0.9	0.8	0.0	0.2
20	13.2	8.0	10.7	8.4	4.1	6.3	2.0	0.0	0.8	0.6	0.0	0.2
21	11.9	8.3	10.3	7.2	3.6	5.5	3.2	0.0	1.3	2.5	0.0	0.9
22	13.8	9.1	11.3	7.6	4.3	6.0	2.7	0.3	1.5	4.6	0.0	2.1
23	13.5	8.8	11.2	7.0	4.9	6.0	2.4	0.0	0.8	2.1	0.0	1.0
24	11.7	8.1	10	6.5	3.2	4.8	1.2	0.0	0.2	1.2	0.0	0.3
25	10.6	6.2	8.5	5.5	2.4	4.0	0.3	0.0	0.0	3.7	0.0	1.5
26	10.5	5.7	8.2	4.8	2.4	3.5	0.5	0.0	0.1	5.5	0.5	2.8
27	11.2	5.6	8.5	2.9	1.0	1.9	2.2	0.0	0.7	5.4	0.7	3.0
28	11.7	8.0	9.8	2.2	0.0	0.8	3.1	0.0	1.3	5.2	1.4	3.1
29	12.9	9.0	10.9	1.7	0.0	0.5	2.4	0.8	1.4	3.7	1.2	2.6
30	12.5	8.4	10.6	3.3	0.1	1.5	2.2	0.0	0.9	2.3	0.2	1.0
31	13.6	9.3	11.2	---	---	---	2.1	0.0	0.8	0.9	0.0	0.2
MONTH	20.3	5.6	11.8	13.1	0.0	7.0	6.1	0.0	1.5	5.5	0.0	1.5
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	0.5	0.0	0.1	4.4	0.0	1.1	14.7	9.1	11.8	19.0	11.1	14.7
2	1.2	0.0	0.4	1.3	0.0	0.2	11.7	6.2	8.5	18.3	11.0	14.2
3	2.9	0.0	1.0	1.1	0.0	0.2	12.2	5.0	8.5	19.3	11.1	15.1
4	3.3	0.0	1.3	5.3	0.0	2.1	13.7	5.8	9.8	19.5	12.1	15.8
5	4.0	0.0	1.8	7.8	0.6	4.1	15.2	7.0	11.2	20.2	11.9	16.0
6	4.1	0.0	1.7	8.0	0.8	4.5	14.5	8.7	11.8	20.4	11.9	16.2
7	4.6	0.0	2.2	9.4	2.4	6.1	13.9	9.5	12.0	21.1	13.3	17.2
8	5.0	0.3	2.6	8.7	4.2	6.7	15.9	9.2	12.5	16.8	13.1	14.7
9	2.8	0.0	1.2	8.0	1.4	4.7	16.9	9.7	13.4	17.5	10.6	13.9
10	3.2	0.0	1.2	9.6	2.2	6.0	16.1	10.8	13.3	19.5	11.0	15.1
11	4.5	0.0	1.9	11.4	4.7	8.1	18.4	10.5	14.1	19.2	12.1	15.5
12	4.1	0.0	1.9	12.6	5.7	9.1	15.4	10.5	13.1	16.6	11.6	13.9
13	4.7	0.0	1.9	13.4	6.8	10	18.2	9.8	13.9	20.4	10.5	15.5
14	3.7	0.2	1.9	12.7	7.3	9.5	19.3	11.4	15.4	18.1	12.1	15.1
15	5.5	0.0	2.8	8.0	5.2	6.3	20.7	13.2	16.7	19.2	11.9	15.9
16	6.1	0.5	3.3	8.4	3.7	5.9	17.8	12.8	15.1	18.5	13.6	16.1
17	7.2	1.8	4.5	8.4	2.6	5.6	18.0	10.2	14.3	15.7	13.1	14.4
18	8.1	3.3	5.7	7.7	2.9	5.5	17.7	10.5	13.9	18.9	12.3	15.5
19	8.4	4.8	6.6	11.4	4.0	7.7	16.4	8.9	12.4	19.2	14.2	16.8
20	7.1	3.2	5.4	12.4	5.0	8.8	11.2	7.2	9.1	19.1	14.6	16.8
21	8.6	3.8	6.1	9.0	4.7	6.6	13.8	5.2	9.6	19.5	14.1	16.6
22	8.3	3.2	5.9	9.2	2.6	6.0	15.7	7.0	11.5	18.7	11.1	15.1
23	9.4	4.4	6.9	10.6	3.9	7.6	18.1	8.6	13.3	17.9	12.2	14.9
24	9.4	4.9	7.0	9.8	6.0	7.7	17.6	9.7	13.6	14.1	11.1	12.5
25	6.4	1.4	3.8	8.1	4.5	6.3	15.5	9.0	12.3	19.2	9.9	14.5
26	4.2	0.0	1.8	12.2	4.0	8.1	17.4	9.8	13.6	20.4	12.5	16.6
27	5.0	0.0	2.3	14.0	6.3	10.1	17.3	11.0	14.1	20.6	14.1	17.1
28	6.8	0.0	3.4	14.7	7.5	11.0	19.0	10.8	14.7	21.7	14.7	18.3
29	---	---	---	14.6	7.9	11.3	17.3	11.4	14.5	21.9	15.1	18.7
30	---	---	---	14.8	7.5	11.1	19.8	6.3	13.3	24.8	15.9	20.4
31	---	---	---	15.4	7.7	11.6	---	---	---	23.4	17.7	20.7
MONTH	9.4	0.0	3.1	15.4	0.0	6.8	20.7	5.0	12.7	24.8	9.9	15.9

07099050 BEAVER CREEK ABOVE UPPER BEAVER CEMETERY NEAR PENROSE, CO

LOCATION.--Lat 38°33'42", long 105°01'17", in NW¹/₄NE¹/₄ sec.20, T.17 S., R.68 W., Fremont County, Hydrologic Unit 11020002, on left bank 40 ft upstream from bridge on Fremont County Road 132, 1 mi downstream from Banta Gulch, 1.3 mi northeast of Upper Beaver Cemetery, and 9.2 mi north of Penrose.

DRAINAGE AREA.--122 mi².

PERIOD OF RECORD.--March 1991 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,020 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation, and diversions for municipal use by the City of Colorado Springs. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 659 ft³/s, June 10, 1997, gage height, 5.57 ft, from rating curve extended above 602 ft³/s; maximum gage height, 6.70 ft, Sept. 4, 1991; minimum daily discharge, 0.75 ft³/s, Sept. 8, 2002.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 23 ft³/s, Apr. 26, gage height, 3.07 ft; minimum daily, 0.75 ft³/s, Sept. 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.7	7.7	7.5	---	---	5.3	9.4	e17	5.5	2.1	2.6	0.92
2	10	7.4	9.2	---	---	5.1	8.9	e17	5.3	2.1	2.8	0.87
3	9.7	7.2	8.6	---	---	8.2	7.7	e5.8	5.2	2.1	3.7	0.84
4	9.3	7.2	e9.0	---	---	7.8	8.1	3.6	5.6	2.3	3.4	0.87
5	9.1	7.2	---	---	---	7.0	8.5	3.2	6.2	3.0	3.2	0.86
6	8.8	7.2	---	---	---	7.0	7.1	5.3	5.7	8.7	2.9	0.81
7	8.5	7.3	---	---	---	6.9	7.2	6.0	5.2	5.4	3.2	0.81
8	8.5	e8.0	---	---	---	6.4	7.0	6.0	4.1	4.0	3.0	0.75
9	8.5	9.2	---	---	---	5.8	7.2	6.4	3.7	3.5	2.9	0.86
10	8.6	8.6	---	---	---	7.3	7.2	6.4	3.5	9.4	2.8	1.8
11	8.5	8.2	---	---	---	6.7	6.5	6.3	3.4	7.0	2.5	2.0
12	8.5	8.6	---	---	---	6.8	6.1	7.1	3.4	5.5	2.3	1.8
13	8.4	8.9	---	---	---	7.1	6.1	7.1	3.7	4.4	2.5	1.9
14	8.2	8.8	---	---	e8.3	7.5	6.2	6.0	3.0	4.0	2.4	2.0
15	8.4	8.6	---	---	6.0	7.3	6.4	5.1	2.9	3.7	2.3	1.8
16	8.3	8.2	---	---	5.7	7.1	5.0	3.7	2.9	3.4	2.3	1.4
17	8.2	8.4	---	---	6.8	6.2	4.2	3.9	3.0	3.2	2.1	1.4
18	8.3	8.5	---	---	6.2	6.7	4.1	3.7	2.8	3.0	2.3	1.3
19	8.2	8.3	---	---	6.1	6.7	4.0	3.6	2.5	2.8	2.3	1.5
20	8.2	e6.0	---	---	6.0	6.7	3.9	3.5	2.8	2.8	2.3	1.6
21	8.2	e7.2	---	---	5.9	6.8	3.5	3.2	2.7	2.8	2.5	1.5
22	8.2	7.7	---	---	6.1	7.1	3.5	2.7	2.4	4.2	2.5	1.4
23	8.3	8.1	---	---	6.4	7.8	3.4	2.6	2.3	4.6	1.7	1.4
24	7.7	7.5	---	---	6.4	8.2	3.3	4.0	2.3	4.0	1.5	1.4
25	7.1	7.6	---	---	5.9	7.9	6.8	4.2	2.4	e3.8	1.4	1.3
26	6.8	7.4	---	---	4.3	7.4	19	3.8	2.5	e3.6	1.2	1.4
27	7.0	6.0	---	---	7.4	7.7	4.4	3.4	2.4	e3.4	1.2	1.5
28	7.1	5.0	---	---	6.9	8.5	3.8	4.5	2.3	e3.2	1.2	1.5
29	7.4	8.3	---	---	---	8.9	3.8	4.4	2.3	e3.0	1.3	1.5
30	7.5	8.9	---	---	---	9.0	15	4.3	2.2	2.8	1.1	1.4
31	7.5	---	---	---	---	9.2	---	4.8	---	2.7	1.00	---
TOTAL	256.7	233.2	---	---	---	224.1	197.3	168.6	104.2	120.5	70.40	40.39
MEAN	8.281	7.773	---	---	---	7.229	6.577	5.439	3.473	3.887	2.271	1.346
MAX	10	9.2	---	---	---	9.2	19	17	6.2	9.4	3.7	2.0
MIN	6.8	5.0	---	---	---	5.1	3.3	2.6	2.2	2.1	1.0	0.75
AC-FT	509	463	---	---	---	445	391	334	207	239	140	80

e Estimated.

07099060 BEAVER CREEK ABOVE HIGHWAY 115 NEAR PENROSE, CO

LOCATION.--Lat 38°29'21", long 104°59'49", in NE¹/₄NE¹/₄ sec.16, T.18 S., R.68 W., Fremont County, Hydrologic Unit 11020002, on left bank 300 ft downstream from Beaver Park Irrigation Company diversion dam, 1.8 mi upstream from State Highway 115, and 4.7 mi north of Penrose.

DRAINAGE AREA.--138 mi².

PERIOD OF RECORD.--March 1991 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 5,659.08 ft above sea level.

REMARKS.--Records good except for July 5 and estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, diversions for municipal use by Colorado Springs, and diversions for irrigation. Flows are regulated to some extent by Beaver Park Irrigation Company diversion dam 300 ft upstream. Several measurements of specific conductance and water temperature, when obtained, are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 727 ft³/s, April 30, 1999, gage height, 6.92 ft, from rating curve extended above 422 ft³/s; no flow many days.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 0.24 ft³/s, July 5, gage height, 1.78 ft; no flow on many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	e0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	---	---	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	---	---	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	0.000	0.000	---	---	---	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MAX	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MIN	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00

e Estimated.

07099080 RED CREEK BELOW SULLIVAN PARK AT FORT CARSON, CO

LOCATION.--Lat 38°29'59", long 104°54'48", in SE¹/₄NW¹/₄ sec.8, T.18 S., R.67 W., Pueblo County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, on right bank 0.8 mi downstream from Sullivan Park outflow (revised), 1.5 mi south of Camp Red Devil, 1.5 mi east of State Highway 115, and 4.9 mi northeast of Penrose.

DRAINAGE AREA.--26.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 2000 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,783 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by erosion-control and livestock-watering reservoirs.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 1,480 ft³/s, July 13, 2001, gage height, 5.27 ft, from rating curve based on slope-conveyance computation; no flow on most days.

EXTREMES FOR CURRENT YEAR (seasonal only).--No flow during year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	0.000	---	---	---	---	---	0.000	0.000	0.000	0.000	0.000	0.000
MAX	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
MIN	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00

07099080 RED CREEK BELOW SULLIVAN PARK AT FORT CARSON, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 2000 to current year (seasonal records only).

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT: July 2000 to current year (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

REMARKS.--Daily suspended-sediment records are fair.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS (seasonal only): None for period of record.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 8,130 tons (estimated), July 13, 2001; no flow on most days.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only): No flow during the year.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): No flow during the year.

--NO FLOW DURING 2002 WATER YEAR--

07099080 RED CREEK BELOW SULLIVAN PARK AT FORT CARSON, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 1999 to current year (seasonal records only). Air-temperature data available, October 2000 to current year, in files of district office.

GAGE.--Tipping-bucket rain gage with satellite telemetry. April 28, 1999 to July 25, 2000, at site 1.5 mi upstream.

REMARKS.--Records fair except for estimated daily precipitation, which are poor.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 4.52 inches, Aug. 4, 1999, site then in use.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 0.91 inch (estimated), July 5, based on comparison with nearby stations using method based on National Weather Service River Forecast System Forecast Procedures.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	e0.00	e0.00
2	0.00	---	---	---	---	---	0.00	0.04	0.00	0.00	e0.00	e0.00
3	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	e0.00	e0.00
4	0.00	---	---	---	---	---	0.00	0.00	0.05	0.00	e0.00	e0.00
5	0.00	---	---	---	---	---	0.00	0.00	0.00	e0.91	e0.00	e0.01
6	0.00	---	---	---	---	---	0.00	0.00	0.00	e0.11	e0.00	e0.00
7	0.00	---	---	---	---	---	0.00	0.00	0.00	e0.00	e0.00	e0.00
8	0.00	---	---	---	---	---	0.00	0.00	0.00	e0.00	e0.00	e0.00
9	0.00	---	---	---	---	---	0.00	0.00	0.00	e0.34	e0.00	e0.09
10	0.00	---	---	---	---	---	0.00	0.00	0.00	e0.01	e0.00	e0.30
11	0.00	---	---	---	---	---	0.06	0.00	0.00	e0.00	e0.00	e0.01
12	0.00	---	---	---	---	---	0.00	0.01	0.00	e0.00	e0.00	e0.38
13	0.00	---	---	---	---	---	0.00	0.00	0.00	e0.00	e0.00	e0.03
14	0.00	---	---	---	---	---	0.00	0.00	0.01	e0.00	e0.00	e0.00
15	0.00	---	---	---	---	---	0.00	0.00	0.00	e0.00	e0.00	e0.00
16	0.00	---	---	---	---	---	0.00	0.11	0.06	e0.01	e0.00	e0.00
17	0.00	---	---	---	---	---	0.00	0.00	0.00	e0.00	e0.00	e0.00
18	0.00	---	---	---	---	---	0.00	0.00	0.00	e0.00	e0.00	e0.10
19	0.00	---	---	---	---	---	0.00	0.00	0.00	e0.00	e0.00	e0.00
20	0.00	---	---	---	---	---	0.07	0.00	0.00	e0.00	e0.00	e0.00
21	0.00	---	---	---	---	---	0.00	0.00	0.00	e0.00	e0.05	e0.00
22	0.00	---	---	---	---	---	0.00	0.00	0.00	e0.04	e0.04	e0.00
23	0.00	---	---	---	---	---	0.00	0.00	0.00	e0.00	e0.00	e0.00
24	0.00	---	---	---	---	---	0.00	0.20	0.00	e0.00	e0.00	e0.00
25	0.00	---	---	---	---	---	0.00	0.00	0.00	e0.00	e0.00	e0.00
26	0.00	---	---	---	---	---	0.00	0.00	0.19	e0.01	e0.00	e0.01
27	0.00	---	---	---	---	---	0.04	0.01	0.00	e0.00	e0.04	e0.00
28	0.00	---	---	---	---	---	0.00	0.00	0.00	e0.04	e0.40	e0.00
29	0.00	---	---	---	---	---	0.00	0.00	0.00	e0.00	e0.03	e0.00
30	0.00	---	---	---	---	---	0.00	0.00	0.00	e0.00	e0.00	e0.00
31	0.00	---	---	---	---	---	---	0.00	---	e0.00	e0.00	---
TOTAL	0.00	---	---	---	---	---	0.17	0.37	0.31	1.47	0.56	0.93
MAX	0.00	---	---	---	---	---	0.07	0.20	0.19	0.91	0.40	0.38

e Estimated.

07099200 ARKANSAS RIVER NEAR PORTLAND, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°20'14", long 104°56'18", in NW¹/₄SW¹/₄ sec.6, T.20 S., R.67 W., Fremont County, Hydrologic Unit 11020002, on left bank at Hobson Ranch, 1.4 mi downstream from Willow Creek, and 5.4 mi southeast of Portland.

DRAINAGE AREA.--4,280 mi².

PERIOD OF RECORD.--October 1964 to September 1979, May to August 1987, March 1999 to current year. Daily discharge data available, October 1964 to September 1974.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT													
11...	1130	233	11.1	8.5	644	10.5	E.014	--	.190	.003	.049	.040	.064
APR													
10...	1115	212	10.3	8.4	613	13.0	.039	--	.368	.009	.121	.101	.170
JUN													
10...	1130	302	9.2	8.6	443	21.0	E.009	--	.063	.003	.092	.071	.123
JUL													
31...	0915	165	7.6	8.2	559	21.0	E.012	.22	.108	.004	.025	.015	.085
AUG													
26...	1300	125	11.0	8.6	593	24.0	E.011	--	.297	.009	.131	.117	.20
SEP													
25...	1030	102	9.7	8.4	685	15.0	E.009	--	.153	.007	.097	.083	.120

Date	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)
OCT 11...	2.5
APR 10...	3.2
JUN 10...	3.6
JUL 31...	2.9
AUG 26...	2.7
SEP 25...	2.7

E Estimated laboratory analysis value.

07099215 TURKEY CREEK NEAR FOUNTAIN, CO

LOCATION.--Lat 38°36'42", long 104°53'39", in NW¹/₄SE¹/₄ sec.33, T.16 S., R.67 W., El Paso County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, on left bank 100 ft downstream from State Highway 115 bridge, 0.7 mi downstream from Turkey Canyon, 0.8 mi upstream from Turkey Creek Ranch, and 9.4 mi southwest of Fountain.

DRAINAGE AREA.--13.0 mi².

PERIOD OF RECORD.--May 1978 to September 1989, May 1995 to September 1998, April 1999 to current year (seasonal records only). Water-quality data available, May 1978 to September 1982.

REVISED RECORDS.--WDR CO-80-1: 1978-79 (M). WDR CO-96-1: 1980 (M), 1982-86 (M).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,420 ft above sea level, from topographic map. Prior to June 14, 2001, at datum 1.00 ft higher.

REMARKS.--Records poor. Several measurements of specific conductance and water temperature, when obtained, are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report. Natural flow of stream affected by upstream diversions for irrigation and livestock.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 850 ft³/s, June 10, 1997, from slope-area measurement of peak flow, gage height, 6.56 ft, from floodmarks; no flow on many days during years.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 20.0 ft³/s, May 24, gage height, 2.25 ft; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
2	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
3	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
4	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
5	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
6	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
7	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
8	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
9	---	---	---	---	---	---	0.00	0.00	0.00	0.09	0.00	0.00
10	---	---	---	---	---	---	0.00	0.00	0.00	0.16	0.00	0.00
11	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.45
13	---	---	---	---	---	e0.00	0.00	0.00	0.00	0.00	0.00	0.31
14	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.02
15	---	---	---	---	---	1.3	0.00	0.00	0.00	0.00	0.00	0.00
16	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	---	---	---	---	---	1.6	0.00	0.00	0.00	0.00	0.00	0.00
19	---	---	---	---	---	0.09	0.00	0.00	0.00	0.00	0.00	0.00
20	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	---	---	---	---	---	0.00	0.00	2.1	0.00	0.00	0.00	0.00
25	---	---	---	---	---	1.1	0.00	0.00	0.00	0.00	0.00	0.00
26	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	---	---	---	---	---	0.00	0.00	0.26	0.00	0.00	0.00	0.00
28	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	---	---	---	---	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	0.00	2.36	0.00	0.25	0.00	0.78
MEAN	---	---	---	---	---	---	0.000	0.076	0.000	0.008	0.000	0.026
MAX	---	---	---	---	---	---	0.00	2.1	0.00	0.16	0.00	0.45
MIN	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	---	---	---	---	---	---	0.00	4.7	0.00	0.5	0.00	1.5

e Estimated.

07099230 TURKEY CREEK ABOVE TELLER RESERVOIR NEAR STONE CITY, CO

LOCATION.--Lat 38°27'54", long 104°49'33", in SW¹/₄SW¹/₄ sec.19, T.18 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, on left bank 0.7 mi northwest of intersection of military roads 9 and 1, 2.2 mi upstream from Teller Reservoir Dam, and 2.2 mi northeast of Stone City.

DRAINAGE AREA.--62.3 mi².

REVISED RECORDS.--WDR CO-89-1: Drainage area.

PERIOD OF RECORD.--May 1978 to current year. Water-quality data available, May 1978 to September 1981.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,520 ft above sea level, from topographic map. Prior to July 21, 1989, at site 0.6 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by diversions for irrigation. Several measurements of specific conductance and water temperature, when obtained, are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2002, BY WATER YEAR (WY)

	2.560	1.801	0.926	0.725	0.686	0.696	2.531	16.26	9.827	2.733	6.468	1.438
MEAN	2.560	1.801	0.926	0.725	0.686	0.696	2.531	16.26	9.827	2.733	6.468	1.438
MAX	44.6	26.7	6.47	2.69	2.58	2.75	21.8	124	60.1	17.1	79.2	18.1
(WY)	1985	1985	1985	1985	1985	1985	1999	1999	1997	1985	1999	1982
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	1979	1979	1979	1979	1979	1979	1979	1979	1989	1978	1990	1978

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1978 - 2002

ANNUAL TOTAL	29.53	0.00	
ANNUAL MEAN	0.081	0.000	
HIGHEST ANNUAL MEAN			21.2 1999
LOWEST ANNUAL MEAN			0.000 2002
HIGHEST DAILY MEAN	0.26 Mar 14	0.00 Oct 1	836 Aug 5 1999
LOWEST DAILY MEAN	0.00 Jun 13	0.00 Oct 1	a0.00 May 18 1978
ANNUAL SEVEN-DAY MINIMUM	0.00 Jun 13	0.00 Oct 1	0.00 May 18 1978
MAXIMUM PEAK FLOW			b3640 Aug 20 1982
MAXIMUM PEAK STAGE			c11.51 Aug 20 1982
ANNUAL RUNOFF (AC-FT)	59	0.00	2880
10 PERCENT EXCEEDS	0.23	0.00	5.3
50 PERCENT EXCEEDS	0.00	0.00	0.40
90 PERCENT EXCEEDS	0.00	0.00	0.00

a No flow many days during many years.

b From rating curve extended above 95 ft³/s on basis of slope-area measurements at gage heights 7.64 ft and 11.27 ft, site and datum then in use.

c Maximum gage height, 11.88 ft, June 8, 1987, site and datum then in use.

07099233 TELLER RESERVOIR NEAR STONE CITY, CO

LOCATION.--Lat 38°26'33", long 104°49'31", in SE¹/₄NW¹/₄ sec.31, T.18 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, at left upstream end of dam on Turkey Creek, 1.4 mi upstream from Booth Gulch, and 2.0 mi east of Stone City.

DRAINAGE AREA.--71.5 mi².

PERIOD OF RECORD.--September 1978 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,453 ft above sea level, from topographic map.

REMARKS.--Reservoir is formed by an earthfill dam completed around 1908. All figures represent total contents from area-capacity table effective Oct. 1, 2001, and based on a 1980 survey and adjusted for sedimentation from a partial area-capacity resurvey during May 2002. Total capacity, 2,603 acre-ft at elevation of about 92 ft. Capacity at spillway crest, 1,115 acre-ft at elevation of about 84 ft (since 1996). Capacity at uncontrolled tower outlet invert, 1,765 acre-ft at elevation of about 88 ft. Elevation of no contents, about 65.2 ft. There is a controlled outlet from reservoir; however, considerable leakage occurs along dam margins. Dead storage unknown. Reservoir is used by the Fort Carson Military Reservation for recreation and amphibious training.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 2,210 acre-ft, June 21, 1980, elevation, 90.15 ft, from capacity curve extended above 88 ft; no contents during many years.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 25 acre-ft, Oct. 1, elevation, 68.44 ft; no contents on many days.

Capacity table (elevation, in feet, and contents, in acre-feet, effective Oct. 1, 2001)

65.20	0.0	80.00	637
67.50	13	82.50	921
70.00	76	85.00	1,270
72.50	167	87.50	1,680
75.00	280	90.00	2,160
77.50	428	92.00	2,600

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	20	e13	e9.0	e6.0	e4.0	e2.0	e0.00	e0.00	e0.00	e0.00	e0.00
2	25	19	e13	e9.0	e6.0	e4.0	e2.0	e0.00	e0.00	e0.00	e0.00	e0.00
3	24	19	e12	e9.0	e6.0	e4.0	e1.0	e0.00	e0.00	e0.00	e0.00	e0.00
4	23	19	e12	e9.0	e6.0	e4.0	e1.0	e0.00	e0.00	e0.00	e0.00	e0.00
5	23	18	e12	e9.0	e6.0	e4.0	e1.0	e0.00	e0.00	e0.00	e0.00	e0.00
6	23	e17	e12	e8.0	e6.0	e4.0	e1.0	e0.00	e0.00	e0.00	e0.00	e0.00
7	23	e17	e12	e8.0	e5.0	e3.0	e1.0	e0.00	e0.00	e0.00	e0.00	e0.00
8	23	e17	e12	e8.0	e5.0	e3.0	e1.0	e0.00	e0.00	e0.00	e0.00	e0.00
9	23	e17	e12	e8.0	e5.0	e3.0	e1.0	e0.00	e0.00	e0.00	e0.00	e0.00
10	23	e16	e12	e8.0	e5.0	e3.0	e1.0	e0.00	e0.00	e0.00	e0.00	e0.00
11	23	e16	e11	e8.0	e5.0	e3.0	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00
12	23	e16	e11	e8.0	e5.0	e3.0	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00
13	23	e16	e11	e8.0	e5.0	e3.0	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00
14	22	e16	e11	e8.0	e5.0	e3.0	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00
15	22	e15	e11	e8.0	e5.0	e3.0	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00
16	23	e15	e11	e7.0	e5.0	e3.0	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00
17	23	e15	e11	e7.0	e5.0	e3.0	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00
18	22	e15	e11	e7.0	e5.0	e3.0	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00
19	22	e15	e10	e7.0	e5.0	e3.0	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00
20	22	e15	e10	e7.0	e4.0	e3.0	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00
21	22	e14	e10	e7.0	e4.0	e3.0	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00
22	22	e14	e10	e7.0	e4.0	e3.0	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00
23	21	e14	e10	e7.0	e4.0	e3.0	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00
24	21	e14	e10	e7.0	e4.0	e3.0	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00
25	22	e14	e10	e7.0	e4.0	e2.0	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00
26	21	e14	e10	e7.0	e4.0	e2.0	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00
27	20	e13	e10	e7.0	e4.0	e2.0	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00
28	20	e13	e9.0	e6.0	e4.0	e2.0	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00
29	20	e13	e9.0	e6.0	---	e2.0	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00
30	21	e13	e9.0	e6.0	---	e2.0	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00
31	21	---	e9.0	e6.0	---	e2.0	---	e0.00	---	e0.00	e0.00	---
MAX	25	20	13	9.0	6.0	4.0	2.0	0.00	0.00	0.00	0.00	0.00
MIN	20	13	9.0	6.0	4.0	2.0	0.00	0.00	0.00	0.00	0.00	0.00

e Estimated.

382629104493000 TURKEY CREEK EAST SEEPAGE BELOW TELLER RESERVOIR NEAR STONE CITY, CO

LOCATION.--Lat 38°26'29", long 104°49'30", in SW¹/₄NW¹/₄ sec.31, T.18 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, at base of left downstream end of Teller Dam on Turkey Creek, and 2.0 mi east of Stone City.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 2001 to September 2002.

GAGE.--Water-stage recorder with satellite telemetry and V-notch sharp-crested weir. Elevation of gage is 5,420 ft above sea level, from topographic map.

REMARKS.--Records poor. Flows less than 0.02 ft³/s can be in error by more than 25-percent. Natural flow of stream affected by Teller Reservoir contents (station 07099233) and saturation of earthfill dam. Mar. 22 flow represents dam seepage and local runoff.

EXTREMES FOR PERIOD OF RECORD (dam seepage only).--Maximum daily discharge, 0.17 ft³/s, Mar. 15, 17, 2002; minimum daily, 0.004 ft³/s (some estimated), on many days during 2002.

EXTREMES FOR CURRENT YEAR (dam seepage only).--Maximum daily discharge, 0.17 ft³/s, Mar. 15, 17; minimum daily, 0.004 ft³/s (some estimated), on many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.051	0.051	0.043	0.060	e0.060	0.120	0.140	e0.054	0.010	0.010	0.004	e0.004
2	0.045	0.031	0.041	0.054	e0.060	0.120	0.120	e0.046	0.090	0.010	0.004	e0.004
3	0.043	0.036	0.044	0.056	e0.060	0.150	e0.120	0.041	0.008	0.008	0.004	e0.004
4	0.044	0.042	0.039	0.072	e0.060	0.160	e0.120	0.041	e0.008	0.007	0.004	e0.004
5	0.048	0.030	0.034	0.072	e0.060	0.140	e0.130	0.038	e0.008	0.008	0.004	e0.004
6	0.053	0.028	0.031	0.080	e0.060	0.110	e0.130	0.035	e0.008	0.008	0.004	e0.004
7	0.053	0.032	0.031	e0.072	e0.060	0.130	e0.130	0.035	0.008	0.006	0.004	e0.004
8	0.053	0.057	0.033	e0.064	e0.060	0.120	e0.130	0.031	0.008	0.006	0.004	e0.004
9	0.051	0.044	0.033	e0.060	e0.060	0.120	e0.130	0.031	0.008	0.006	0.004	0.004
10	0.055	0.046	0.033	e0.060	0.079	0.150	e0.130	0.030	0.008	0.006	0.004	0.004
11	0.055	0.048	0.036	e0.060	0.080	e0.140	e0.130	0.027	0.008	0.006	0.004	0.004
12	0.056	0.059	0.039	0.058	0.076	e0.140	0.130	0.025	0.008	0.006	0.004	0.004
13	0.063	0.059	0.038	0.054	e0.080	e0.140	0.110	0.023	0.008	0.006	0.004	0.004
14	0.066	0.068	0.041	0.047	e0.080	0.140	0.110	0.021	0.008	0.006	0.004	0.004
15	0.060	0.067	0.038	0.046	e0.080	0.170	0.099	0.019	0.008	0.004	0.004	0.004
16	0.065	0.052	0.035	0.051	e0.080	0.160	0.098	0.017	0.008	0.004	0.004	0.004
17	0.066	0.045	0.042	0.059	e0.080	0.170	0.089	0.016	0.008	0.004	0.004	0.005
18	0.070	0.043	0.047	e0.066	e0.080	0.140	0.089	0.015	0.008	0.004	0.004	0.006
19	0.062	0.041	0.036	e0.066	e0.090	0.130	0.082	0.014	0.008	0.004	0.004	e0.006
20	0.074	0.035	0.031	0.062	e0.100	0.120	0.089	0.012	0.008	0.004	0.004	e0.006
21	e0.076	0.035	0.042	0.061	0.110	0.120	0.083	0.011	0.008	0.004	0.004	e0.006
22	0.076	0.035	0.049	0.059	0.120	0.170	0.079	0.010	0.008	0.004	0.004	e0.006
23	0.059	0.035	0.040	0.049	0.140	0.130	0.075	0.010	0.007	0.004	0.004	e0.006
24	0.052	0.035	0.032	0.049	0.140	0.100	0.073	0.010	0.006	0.004	0.004	e0.006
25	0.047	0.038	0.034	0.055	0.110	0.130	0.070	0.010	0.009	0.004	e0.004	e0.006
26	0.055	0.039	0.045	0.052	0.120	0.110	0.070	0.010	0.010	0.004	e0.004	e0.006
27	0.060	0.040	0.062	0.046	0.140	e0.120	0.072	0.010	0.008	0.005	e0.004	e0.006
28	0.059	0.041	0.067	0.046	0.150	0.140	e0.066	0.010	0.009	0.005	e0.004	e0.006
29	0.056	0.054	0.059	0.046	---	0.130	e0.064	0.010	0.008	0.005	e0.004	e0.006
30	0.058	0.052	0.050	0.055	---	0.130	e0.060	0.010	0.011	0.005	e0.004	e0.006
31	0.059	---	0.064	e0.066	---	0.130	---	0.010	---	0.005	e0.004	---
TOTAL	1.790	1.318	1.289	1.803	2.475	4.180	3.018	0.682	0.328	0.172	0.124	0.147
MEAN	0.058	0.044	0.042	0.058	0.088	0.135	0.101	0.022	0.011	0.006	0.004	0.005
MAX	0.076	0.068	0.067	0.080	0.15	0.17	0.14	0.054	0.090	0.010	0.004	0.006
MIN	0.043	0.028	0.031	0.046	0.060	0.10	0.060	0.010	0.006	0.004	0.004	0.004
AC-FT	3.6	2.6	2.6	3.6	4.9	8.3	6.0	1.4	0.7	0.3	0.2	0.3

e Estimated.

382628104493700 TURKEY CREEK WEST SEEPAGE BELOW TELLER RESERVOIR NEAR STONE CITY, CO

LOCATION.--Lat 38°26'28", long 104°49'37", in SW¹/₄NW¹/₄ sec.31, T.18 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, at base of right downstream end of Teller Dam on Turkey Creek, and 1.9 mi east of Stone City.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 2001 to September 2002.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,420 ft above sea level, from topographic map.

REMARKS.--Records poor. Natural flow of stream affected by Teller Reservoir contents (station 07099233) and saturation of earthfill dam.

EXTREMES FOR PERIOD OF RECORD (dam seepage only).--No flow during period of record.

EXTREMES FOR CURRENT YEAR (dam seepage only).--No flow during current year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	e0.000	e0.000	0.000	0.000	0.000
2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	e0.000	0.000	0.000	0.000
3	0.000	0.000	0.000	e0.000	0.000	0.000	0.000	0.000	e0.000	0.000	0.000	0.000
4	0.000	0.000	0.000	e0.000	0.000	0.000	0.000	0.000	e0.000	0.000	0.000	0.000
5	0.000	0.000	0.000	e0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
6	0.000	0.000	0.000	e0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7	0.000	0.000	0.000	e0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	0.000	0.000	0.000	e0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22	0.000	0.000	0.000	e0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	e0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26	0.000	0.000	e0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27	0.000	0.000	e0.000	0.000	0.000	0.000	e0.000	e0.000	0.000	0.000	0.000	0.000
28	0.000	0.000	e0.000	0.000	0.000	0.000	e0.000	e0.000	0.000	0.000	0.000	0.000
29	0.000	0.000	e0.000	0.000	---	0.000	e0.000	e0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	e0.000	0.000	---	0.000	e0.000	e0.000	0.000	0.000	0.000	0.000
31	0.000	---	e0.000	0.000	---	0.000	---	e0.000	---	0.000	0.000	---
TOTAL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MAX	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

e Estimated.

07099235 TURKEY CREEK NEAR STONE CITY, CO

LOCATION.--Lat 38°25'56", long 104°49'58", in SE¹/₄SE¹/₄ sec.36, T.18 S., R.67 W., Pueblo County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, on left bank at downstream end of culverts on military road 14, 1.1 mi downstream from Teller Reservoir Dam, and 2.0 mi southeast of Stone City.

DRAINAGE AREA.--72.4 mi² (revised).

PERIOD OF RECORD.--May 1978 to September 1984, June 1987 to current year.

REVISED RECORDS.--WDR CO-80-1: 1979(M).

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 5,350 ft above sea level, from topographic map. Prior to June 12, 1987, at site 1.0 mi upstream at different datum. June 12, 1987 to Dec. 6, 1989, at site 0.6 mi upstream at different datum. Dec. 7, 1989 to Dec. 9, 1999, at site 0.9 mi upstream at different datum.

REMARKS.--Records good. Natural flow of stream affected by erosion-control and livestock-watering reservoirs, storage reservoir, diversions for irrigation, ground-water withdrawals, and return flows from irrigated areas. Flow mostly regulated by Teller Reservoir (station 07099233) 1.1 mi upstream. Gage records seepage and releases from reservoir. Several measurements of specific conductance and water temperature, when obtained, are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2002, BY WATER YEAR (WY)

	1978	1979	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
MEAN	0.348	0.366	0.799	0.503	0.451	0.435	0.409	1.312	2.241	1.081	0.801	0.575	
MAX	1.64	1.57	10.8	5.23	3.69	3.54	2.75	8.37	20.3	9.78	4.43	3.03	
(WY)	1983	1983	2000	2000	2000	2000	2000	1995	1995	1995	1995	1995	
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1978 - 2002

ANNUAL TOTAL	95.82	0.00	
ANNUAL MEAN	0.263	0.000	0.782
HIGHEST ANNUAL MEAN			3.93 1995
LOWEST ANNUAL MEAN			0.000 2002
HIGHEST DAILY MEAN	2.6 Jul 14	0.00 Oct 1	70 May 31 1995
LOWEST DAILY MEAN	0.00 Apr 1	0.00 Oct 1	a0.00 Sep 17 1989
ANNUAL SEVEN-DAY MINIMUM	0.00 Apr 14	0.00 Oct 1	0.00 Apr 14 2001
MAXIMUM PEAK FLOW			b83 May 30 1995
MAXIMUM PEAK STAGE			c6.29 May 30 1995
ANNUAL RUNOFF (AC-FT)	190	0.00	566
10 PERCENT EXCEEDS	0.82	0.00	1.6
50 PERCENT EXCEEDS	0.06	0.00	0.16
90 PERCENT EXCEEDS	0.00	0.00	0.01

e Estimated.
a Also occurred on many days during 2000-2002.
b From rating curve extended above 62 ft³/s.
c Site and datum then in use.

07099238 TELLER RESERVOIR SPILLWAY NEAR STONE CITY, CO

LOCATION.--Lat 38°26'20", long 104°49'15", in NE¹/₄SW¹/₄ sec.31, T.18 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, on right bank 0.4 mi southeast of Teller Reservoir Dam on Turkey Creek (revised), and 1.2 mi southeast of Stone City.

DRAINAGE AREA.--71.5 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 2000 to current year.

GAGE.--Water-stage recorder with satellite telemetry and broad-crested weir. Elevation of gage is 5,480 ft above sea level, from topographic map.

REMARKS.--Records poor. Records represent uncontrolled overflow from Teller Reservoir and local storm runoff. There was no overflow from Teller Reservoir during the year. Published flows represent local storm runoff, including July 5-6 and Sept. 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	e0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	e0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.00	0.06
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.019	0.000	0.002
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.00	0.06
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.2	0.00	0.1

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2002, BY WATER YEAR (WY)

	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.018	0.017	0.005	0.001
MAX	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.036	0.019	0.010	0.002
(WY)	2002	2001	2001	2001	2001	2001	2001	2001	2001	2002	2001	2002
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.015	0.000	0.000
(WY)	2002	2001	2001	2001	2001	2001	2001	2002	2002	2001	2002	2001

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 2001 - 2002

ANNUAL TOTAL	2.02	0.64	
ANNUAL MEAN	0.006	0.002	0.002
HIGHEST ANNUAL MEAN			0.002 2002
LOWEST ANNUAL MEAN			0.002 2002
HIGHEST DAILY MEAN	0.71 Jun 21	0.39 Jul 6	0.71 Jun 21 2001
LOWEST DAILY MEAN	0.00 Jan 1	a0.00 Oct 1	a0.00 Oct 20 2000
ANNUAL SEVEN-DAY MINIMUM	0.00 Jan 1	0.00 Oct 1	0.00 Oct 20 2000
MAXIMUM PEAK FLOW		b13 Jul 6	b19 Jun 21 2001
MAXIMUM PEAK STAGE		3.74 Jul 6	3.86 Jun 21 2001
ANNUAL RUNOFF (AC-FT)	4.0	1.3	1.3
10 PERCENT EXCEEDS	0.00	0.00	0.00
50 PERCENT EXCEEDS	0.00	0.00	0.00
90 PERCENT EXCEEDS	0.00	0.00	0.00

e Estimated.

a No flow on most days.

b From rating curve based on open-channel flow computations.

ARKANSAS RIVER BASIN

07099238 TELLER RESERVOIR SPILLWAY NEAR STONE CITY, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--May 2001 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published during period of operation are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.38 inches, June 20, 2001.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 0.92 inch, July 5.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	---	---	---	---	0.00	0.02	0.00	0.01	0.00	0.00
3	0.00	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	---	---	---	---	0.00	0.00	0.56	0.00	0.00	0.01
5	0.01	0.00	---	---	---	---	0.00	0.00	0.00	0.92	0.00	0.00
6	0.01	0.00	---	---	---	---	0.00	0.00	0.00	0.19	0.00	0.00
7	0.00	0.14	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.48	---	---	---	---	0.00	0.03	0.00	0.00	0.00	0.00
9	0.00	0.01	---	---	---	---	0.00	0.00	0.00	0.27	0.00	0.14
10	0.00	0.00	---	---	---	---	0.00	0.00	0.00	0.09	0.00	0.38
11	0.00	0.00	---	---	---	---	0.04	0.00	0.00	0.00	0.00	0.03
12	0.00	0.00	---	---	---	---	0.00	0.08	0.00	0.00	0.00	0.23
13	0.00	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.01
14	0.00	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.01
15	0.00	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	---	---	---	---	0.00	0.60	0.05	0.00	0.00	0.00
17	0.00	0.00	---	---	---	---	0.00	0.03	0.00	0.00	0.00	0.00
18	0.00	0.25	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.27
19	0.00	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	---	---	---	---	0.08	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.01	0.00
22	0.00	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.05	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	---	---	---	---	0.00	0.22	0.00	0.00	0.00	0.00
25	0.00	0.00	---	---	---	---	0.00	0.00	0.36	0.00	0.00	0.01
26	0.00	0.00	---	---	---	---	0.01	0.00	0.00	0.04	0.00	0.00
27	0.00	e0.00	---	---	---	---	0.03	0.00	0.00	0.00	0.01	0.01
28	0.00	e0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.31	0.00
29	0.00	e0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.07	0.00
30	0.00	e0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	0.02	0.93	---	---	---	---	0.16	0.98	0.97	1.52	0.40	1.10
MAX	0.01	0.48	---	---	---	---	0.08	0.60	0.56	0.92	0.31	0.38

e Estimated.

07099350 PUEBLO RESERVOIR NEAR PUEBLO, CO

LOCATION.--Lat 38°16'15", long 104°43'30", in NE¼ sec.36, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, at dam on Arkansas River, 7 mi west of Pueblo.

DRAINAGE AREA.--4,669 mi².

RESERVOIR ELEVATIONS AND CONTENTS RECORDS

PERIOD OF RECORD.--January 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,898.70 ft above sea level, (levels by U.S. Bureau of Reclamation); gage readings at 2400 have been reduced to elevations above sea level.

REMARKS.--Reservoir is formed by concrete and earthfill dam. Storage began Jan. 9, 1974; dam completed in August 1975. Capacity, 357,700 acre-ft at elevation 4,898.70 ft, crest of spillway. Dead storage, 3,730 acre-ft, below elevation 4,764.00 ft, invert of river outlet. Reservoir is terminal reservoir of the Fryingpan-Arkansas project and is used to provide flood control, municipal and industrial supplies, and to fulfill irrigation requirements in the Arkansas River valley. Figures given are total contents.

COOPERATION.--Records provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 295,480 acre-ft, Feb. 12, 1985, elevation, 4,886.94 ft; minimum since appreciable storage was attained, 22,680 acre-ft, Nov. 13, 1974, elevation, 4,790.50 ft.

EXTREMES (AT 2400) FOR CURRENT YEAR.--Maximum contents, 146,620 acre-ft, Mar. 17, elevation, 4,851.67 ft; minimum contents, 78,080 acre-ft, Sept. 30, elevation, 4,826.27 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	4,834.08	96,640	-
Oct. 31.	4,832.37	92,360	-4,280
Nov. 30.	4,834.90	98,740	+6,380
Dec. 31.	4,841.62	116,770	+18,030
CAL YR 2001.	-	-	-73,020
Jan. 31.	4,846.67	131,310	+14,540
Feb. 28.	4,850.23	142,110	+10,800
Mar. 31.	4,851.40	145,770	+3,660
Apr. 30.	4,848.84	137,840	-7,930
May 31.	4,842.61	119,550	-18,290
June 30.	4,835.96	101,490	-18,060
July 31.	4,829.08	84,470	-17,020
Aug. 31.	4,827.24	80,250	-4,220
Sept. 30.	4,826.27	78,080	-2,170
WTR YR 2002.	-	-	-18,560

ARKANSAS RIVER BASIN

PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

WATER-QUALITY RECORDS

Water-quality samples and field measurements were collected at various depths at a number of sites on transects located along the length of the reservoir. Data are collected in an effort to represent the complete seasonal cycle of lake dynamics.

381754104504000 PUEBLO RESERVOIR SITE 2B

LOCATION (REVISED).--Lat 38°17'54", long 104°50'40", in SW¹/₄NW¹/₄ sec.24, T.20 S., R.67 W., Pueblo County, Hydrologic Unit 11020002, at approximate center of transect approximately 1.1 mi downstream from Rush Creek, 1.1 mi upstream from Turkey Creek, 7.8 mi upstream from Pueblo Dam on Arkansas River, and 14.2 mi west of the Pueblo County Courthouse.

PERIOD OF RECORD.--June 1988 to current year (site dry during 1990-92, 2002).

REMARKS.--Site dry during all scheduled sampling events this year.

SITE DRY DURING CURRENT WATER YEAR

PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

WATER-QUALITY RECORDS

381725104494400 PUEBLO RESERVOIR SITE 3B

LOCATION (REVISED).--Lat 38°17'25", long 104°49'44", in SW¹/₄SW¹/₄ sec.19, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, at approximate center of transect approximately 100 ft downstream from Turkey Creek, 6.7 mi upstream from Pueblo Dam on Arkansas River, and 13.4 mi west of the Pueblo County Courthouse.

PERIOD OF RECORD.--June 1988 to current year.

REMARKS.--Chlorophyll samples were composited from samples collected at the surface, at the transparency depth (secchi disk), and at twice the transparency depth.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SAM-PLING DEPTH (FEET) (00003)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	TURBID-ITY LAB HACH 2100AN (NTU) (MG/L) (99872)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) (AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) (AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) (AS N) (00613)	PHOS-PHORUS DIS-SOLVED (MG/L) (AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L) (AS P) (00671)
APR													
09...	1429	--	.30	--	--	--	--	--	--	--	--	--	--
09...	1430	.10	--	--	6.7	8.1	589	14.5	.075	.337	.009	.034	.023
09...	1431	3.00	--	--	6.8	8.1	592	14.3	.072	.512	.009	.032	.021
09...	1433	6.00	--	--	6.7	8.1	660	13.2	--	--	--	--	--
09...	1435	9.00	--	--	6.6	8.0	776	12.4	--	--	--	--	--
MAY													
16...	1234	--	.20	--	--	--	--	--	--	--	--	--	--
16...	1235	.10	--	--	6.7	7.9	774	17.2	--	--	--	--	--
16...	1240	2.00	--	--	6.6	7.9	769	17.2	--	--	--	--	--

V Analyte was detected in both the environmental sample and the associated blanks.

ARKANSAS RIVER BASIN

PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

WATER-QUALITY RECORDS

381647104475300 PUEBLO RESERVOIR SITE 4B

LOCATION (REVISED).--Lat 38°16'47", long 104°47'53", in NW¹/₄SE¹/₄ sec.29, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, at approximate center of transect approximately 1.3 mi upstream from Peck Creek, 2.2 mi downstream from Turkey Creek, 4.5 mi upstream from Pueblo Dam on Arkansas River, and 10.9 mi west of the Pueblo County Courthouse.

PERIOD OF RECORD.--June 1988 to current year.

REMARKS.--Additional water-quality data were collected as part of a water-quality assessment of drought conditions and are also published in the "Drought Synoptic Sampling" section of this report.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SAM- PLING DEPTH (FEET) (00003)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT							
10...	1229	--	.61	--	--	--	--
10...	1230	.10	--	7.6	8.0	505	16.3
10...	1231	3.00	--	7.5	8.1	506	16.3
10...	1232	6.00	--	7.4	8.2	506	16.3
10...	1233	9.00	--	7.3	8.2	506	16.3
10...	1234	12.0	--	7.3	8.2	506	16.3
10...	1235	15.0	--	7.3	8.2	511	16.1
10...	1236	17.0	--	7.0	8.2	584	14.3
APR							
09...	1359	--	.76	--	--	--	--
09...	1400	.10	--	8.1	8.2	539	11.2
09...	1402	6.00	--	8.6	8.2	532	9.4
09...	1403	12.0	--	8.6	8.1	531	8.8
09...	1405	18.0	--	8.3	8.1	530	8.4
09...	1406	24.0	--	8.4	8.1	529	8.1
09...	1408	30.0	--	8.3	8.1	529	7.9
09...	1410	35.0	--	8.2	8.1	529	7.9
MAY							
16...	1159	--	1.83	--	--	--	--
16...	1200	.10	--	8.7	8.4	562	15.6
16...	1202	6.00	--	8.8	8.4	562	15.4
16...	1204	12.0	--	8.6	8.4	564	15.0
16...	1206	18.0	--	8.7	8.4	563	14.9
16...	1208	24.0	--	8.3	8.3	563	14.7
16...	1210	26.0	--	7.9	8.2	564	14.2
JUN							
11...	1304	--	.91	--	--	--	--
11...	1305	.10	--	8.0	8.2	524	21.7
11...	1306	6.00	--	7.7	8.1	524	20.9
11...	1307	12.0	--	6.8	8.0	548	19.7
11...	1308	18.0	--	6.6	7.9	552	19.5
11...	1309	23.0	--	5.3	7.7	558	18.6
JUL							
22...	1319	--	.46	--	--	--	--
22...	1320	.10	--	6.9	8.1	623	25.8
22...	1323	6.00	--	6.7	8.0	618	25.7
22...	1326	12.0	--	5.8	7.8	628	25.2
22...	1328	14.0	--	3.9	7.6	630	24.2
AUG							
27...	1429	--	.30	--	--	--	--
27...	1430	.10	--	9.9	8.6	626	23.9
27...	1433	6.00	--	7.6	8.3	630	23.2
27...	1435	11.0	--	7.0	8.2	633	23.0
SEP							
26...	1214	--	.46	--	--	--	--
26...	1215	.10	--	10.6	8.6	632	19.1
26...	1218	6.00	--	9.2	8.5	634	18.8
26...	1221	10.0	--	7.1	8.3	654	18.3

PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

WATER-QUALITY RECORDS

381559104465500 PUEBLO RESERVOIR SITE 5C

LOCATION (REVISED).--Lat 38°15'59", long 104°46'55", in SW¹/₄NE¹/₄ sec.33, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, at approximate center of transect approximately 0.1 mi upstream from Peck Creek, 1.2 mi upstream from Rock Creek, 3.2 mi upstream from Pueblo Dam on Arkansas River, and 9.6 mi west of the Pueblo County Courthouse.

PERIOD OF RECORD.--June 1988 to current year.

REMARKS.--Chlorophyll samples were composited from samples collected at the surface, at the transparency depth (secchi disk), and at twice the transparency depth. Additional water-quality data were collected as part of a water-quality assessment of drought conditions and are also published in the "Drought Synoptic Sampling" section of this report.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SAM- PLING DEPTH (FEET) (00003)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT							
10...	1124	--	.60	--	--	--	--
10...	1126	.10	--	6.8	8.1	486	17.2
10...	1127	3.00	--	6.7	8.1	486	17.3
10...	1128	6.00	--	6.6	8.1	486	17.2
10...	1129	9.00	--	6.7	8.1	487	17.2
10...	1130	12.0	--	6.7	8.1	488	17.0
10...	1131	15.0	--	6.7	8.1	488	16.9
10...	1132	18.0	--	6.6	8.1	488	16.8
10...	1133	21.0	--	6.6	8.1	493	16.7
10...	1134	24.0	--	7.0	8.2	510	16.4
10...	1135	27.0	--	7.1	8.2	518	16.2
10...	1136	30.0	--	6.9	8.2	528	16.1
10...	1137	32.0	--	6.9	8.2	529	16.1
APR							
09...	1239	--	1.52	--	--	--	--
09...	1240	.10	--	8.2	8.3	530	10.3
09...	1241	3.00	--	8.5	8.4	530	9.2
09...	1242	6.00	--	8.4	8.4	530	8.8
09...	1243	9.00	--	8.4	8.3	529	8.4
09...	1244	12.0	--	8.4	8.3	529	8.3
09...	1245	15.0	--	8.4	8.3	528	8.0
09...	1246	18.0	--	8.4	8.3	527	7.8
09...	1247	21.0	--	8.4	8.3	526	7.8
09...	1248	24.0	--	8.4	8.3	526	7.7
09...	1249	27.0	--	8.4	8.3	526	7.7
09...	1250	30.0	--	8.4	8.3	527	7.7
09...	1251	33.0	--	8.4	8.3	527	7.7
09...	1252	36.0	--	8.4	8.3	527	7.7
09...	1253	39.0	--	8.4	8.3	527	7.7
09...	1254	42.0	--	8.3	8.3	527	7.7
09...	1255	45.0	--	8.3	8.3	528	7.6
09...	1256	48.0	--	8.0	8.2	529	7.1
09...	1258	49.0	--	7.9	8.2	529	7.1
MAY							
16...	1129	--	2.74	--	--	--	--
16...	1130	.10	--	8.0	8.3	567	15.2
16...	1132	3.00	--	8.0	8.3	566	15.2
16...	1133	6.00	--	8.0	8.3	566	15.1
16...	1134	9.00	--	8.1	8.3	566	14.8
16...	1135	12.0	--	8.1	8.3	565	14.6
16...	1136	15.0	--	8.0	8.2	565	14.5
16...	1138	18.0	--	7.6	8.2	565	14.0
16...	1139	21.0	--	7.2	8.1	565	13.7
16...	1140	24.0	--	7.0	8.0	564	13.4
16...	1141	27.0	--	6.9	8.0	564	13.3
16...	1142	30.0	--	6.9	8.0	564	13.3
16...	1143	33.0	--	6.8	7.9	560	12.6
16...	1144	36.0	--	6.9	7.9	559	12.5
16...	1145	39.0	--	6.9	7.9	558	12.4

ARKANSAS RIVER BASIN

PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

381559104465500 PUEBLO RESERVOIR SITE 5C--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SAM- PLING DEPTH (FEET) (00003)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
JUN							
11...	1129	--	2.13	--	--	--	--
11...	1130	.10	--	7.2	8.2	543	20.4
11...	1133	3.00	--	7.2	8.2	544	20.1
11...	1134	6.00	--	7.2	8.2	553	19.8
11...	1135	9.00	--	7.2	8.2	556	19.7
11...	1136	12.0	--	7.2	8.2	558	19.6
11...	1137	15.0	--	7.1	8.2	558	19.6
11...	1138	18.0	--	7.0	8.2	560	19.6
11...	1139	21.0	--	6.9	8.1	561	19.5
11...	1141	24.0	--	6.5	8.0	564	18.9
11...	1142	27.0	--	5.9	7.9	572	16.9
11...	1143	30.0	--	5.4	7.7	572	15.9
11...	1146	32.0	--	4.7	7.6	572	15.0
JUL							
22...	1139	--	1.52	--	--	--	--
22...	1140	.10	--	6.8	8.2	592	25.1
22...	1141	3.00	--	6.7	8.2	593	25.0
22...	1142	6.00	--	6.6	8.2	595	24.9
22...	1143	9.00	--	6.2	8.1	599	24.6
22...	1144	12.0	--	5.8	8.1	599	24.5
22...	1146	15.0	--	5.6	8.0	600	24.4
22...	1147	18.0	--	5.5	8.0	601	24.4
22...	1148	21.0	--	5.5	8.0	601	24.4
22...	1149	24.0	--	3.5	7.7	600	23.9
22...	1152	27.0	--	2.9	7.6	597	23.6
22...	1154	28.0	--	2.8	7.6	598	23.6
AUG							
27...	1254	--	.91	--	--	--	--
27...	1255	.10	--	7.7	8.5	634	22.8
27...	1257	3.00	--	7.6	8.5	634	22.8
27...	1258	6.00	--	7.6	8.5	634	22.8
27...	1259	9.00	--	7.4	8.4	634	22.7
27...	1301	12.0	--	7.3	8.4	634	22.7
27...	1302	15.0	--	7.1	8.4	636	22.6
27...	1303	18.0	--	7.0	8.4	638	22.5
27...	1304	19.0	--	7.0	8.4	640	22.4
SEP							
26...	1057	--	.61	--	--	--	--
26...	1058	.10	--	7.5	8.3	639	19.0
26...	1059	3.00	--	7.5	8.3	638	19.0
26...	1101	6.00	--	7.4	8.3	638	18.9
26...	1102	9.00	--	7.4	8.3	638	18.8
26...	1103	12.0	--	7.3	8.3	638	18.8
26...	1104	15.0	--	7.0	8.3	638	18.6
26...	1106	18.0	--	7.1	8.3	639	18.5
26...	1108	19.0	--	7.1	8.3	639	18.5

PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

381559104465500 PUEBLO RESERVOIR SITE 5C--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SAM- PLING DEPTH (FEET) (00003)	TRANS- PAR- ENCY DISK) (M) (00078)	TURBID- ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)
OCT													
10...	1124	--	.60	--	--	--	--	--	--	--	--	--	--
10...	1125	.10	--	--	6.8	8.1	486	17.2	.045	--	.166	.006	.010
10...	1140	30.0	--	--	6.9	8.2	528	16.1	.046	--	.141	.006	.006
APR													
09...	1239	--	1.52	--	--	--	--	--	--	--	--	--	--
09...	1300	.10	--	--	8.2	8.3	530	10.3	<.015	--	.289	.005	.006
09...	1315	49.0	--	--	7.9	8.2	529	7.1	.019	--	.289	.004	.008
09...	1335	--	--	7.4	--	--	--	--	--	--	--	--	--
JUN													
11...	1129	--	2.13	--	--	--	--	--	--	--	--	--	--
11...	1140	.10	--	--	6.9	8.2	543	20.4	.020	--	.207	.007	.008
11...	1200	30.0	--	--	5.1	7.7	572	15.9	.047	--	.253	.007	.006
11...	1230	--	--	3.9	--	--	--	--	--	--	--	--	--
JUL													
22...	1139	--	1.52	--	--	--	--	--	--	--	--	--	--
22...	1200	.10	--	--	6.8	8.2	592	25.1	E.011	.19	.157	.011	.005
22...	1215	14.0	--	--	5.6	8.0	600	24.4	E.012	.19	.156	.011	.006
22...	1230	28.0	--	--	2.8	7.6	598	23.6	.021	.18	.162	.011	.005
22...	1300	--	--	4.5	--	--	--	--	--	--	--	--	--
AUG													
27...	1254	--	.91	--	--	--	--	--	--	--	--	--	--
27...	1315	.10	--	--	7.7	8.5	634	22.8	E.009	.19	.056	.006	.007
27...	1330	9.00	--	--	7.4	8.4	634	22.7	E.009	.17	.055	.005	.008
27...	1345	18.0	--	--	7.0	8.4	638	22.5	E.012	.21	.053	.006	.006
27...	1400	--	--	5.9	--	--	--	--	--	--	--	--	--
SEP													
26...	1057	--	.61	--	--	--	--	--	--	--	--	--	--
26...	1115	.10	--	--	7.5	8.3	639	19.0	.018	.21	.083	.007	.007
26...	1130	9.00	--	--	7.4	8.3	638	18.8	.015	.21	.081	.007	.006
26...	1145	18.0	--	--	7.1	8.3	639	18.5	.022	.21	.081	.007	.006
26...	1200	--	--	14	--	--	--	--	--	--	--	--	--

E Estimated laboratory analysis value.

ARKANSAS RIVER BASIN

PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

381559104465500 PUEBLO RESERVOIR SITE 5C--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	PHEO- PHYTIN A, PHYTO- (UG/L) (62360)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
OCT						
10...	--	--	--	--	--	--
10...	<.007	.025	V2.4	5.2	4.5	--
10...	<.007	.027	V2.5	--	--	--
APR						
09...	--	--	--	--	--	--
09...	<.007	.021	--	--	--	--
09...	<.007	.015	--	--	--	--
09...	--	--	--	3.1	13.2	--
JUN						
11...	--	--	--	--	--	--
11...	<.007	.014	V2.9	--	--	--
11...	<.007	.016	V2.6	--	--	--
11...	--	--	--	.9	10.3	--
JUL						
22...	--	--	--	--	--	--
22...	<.007	.017	--	--	--	E1.2
22...	<.007	.018	--	--	--	E.9
22...	<.007	.032	--	--	--	4.7
22...	--	--	--	2.0	12.7	--
AUG						
27...	--	--	--	--	--	--
27...	<.007	.028	V2.5	--	--	<2.0
27...	<.007	.027	--	--	--	<2.0
27...	<.007	.030	V2.6	--	--	E.9
27...	--	--	--	--	--	--
SEP						
26...	--	--	--	--	--	--
26...	<.007	.032	V2.7	--	--	--
26...	<.007	.033	--	--	--	--
26...	<.007	.027	V2.6	--	--	--
26...	--	--	--	--	--	--

E Estimated laboratory analysis value.

V Analyte was detected in both the environmental sample and the associated blanks.

PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

WATER-QUALITY RECORDS

381548104453300 PUEBLO RESERVOIR SITE 6C

LOCATION (REVISED).--Lat 38°15'48", long 104°45'33", in NE¹/₄ SE¹/₄ sec.34, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, at approximate center of transect approximately 0.2 mi downstream from Rock Creek, 1.2 mi downstream from Peck Creek, 2.0 mi upstream from Pueblo Dam on Arkansas River, and 8.4 mi west of the Pueblo County Courthouse.

PERIOD OF RECORD.--June 1988 to current year.

REMARKS.--Additional water-quality data were collected as part of a water-quality assessment of drought conditions and are also published in the "Drought Synoptic Sampling" section of this report.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SAM- DEPTH (FEET) (00003)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT							
10...	1104	--	.61	--	--	--	--
10...	1105	.10	--	6.7	8.0	481	17.6
10...	1106	6.00	--	6.5	8.0	481	17.6
10...	1107	12.0	--	6.3	8.0	481	17.5
10...	1108	18.0	--	6.3	8.0	482	17.5
10...	1109	24.0	--	6.3	8.0	482	17.5
10...	1110	30.0	--	6.3	8.0	483	17.5
10...	1111	36.0	--	6.4	8.0	483	17.4
10...	1112	42.0	--	6.5	8.0	483	17.3
10...	1113	48.0	--	6.6	8.0	485	17.2
10...	1114	53.0	--	6.5	8.0	489	17.1
APR							
09...	1159	--	2.13	--	--	--	--
09...	1200	.10	--	8.4	8.3	526	9.2
09...	1202	6.00	--	9.0	8.3	525	7.6
09...	1203	12.0	--	9.3	8.3	525	7.4
09...	1204	18.0	--	9.2	8.3	525	7.3
09...	1206	24.0	--	8.8	8.3	525	7.1
09...	1208	30.0	--	8.7	8.3	525	7.1
09...	1210	36.0	--	8.6	8.3	525	7.0
09...	1212	42.0	--	8.6	8.3	525	6.8
09...	1214	48.0	--	8.6	8.3	525	6.8
09...	1216	54.0	--	8.5	8.3	525	6.7
09...	1217	60.0	--	8.4	8.2	525	6.4
09...	1218	66.0	--	8.3	8.2	526	6.3
09...	1220	71.0	--	8.2	8.2	527	6.2
MAY							
16...	1059	--	4.88	--	--	--	--
16...	1100	.10	--	7.9	8.1	567	15.0
16...	1102	6.00	--	8.0	8.1	566	14.5
16...	1103	12.0	--	8.0	8.1	566	14.1
16...	1104	18.0	--	7.8	8.1	565	13.8
16...	1106	24.0	--	7.6	8.0	562	13.0
16...	1108	30.0	--	7.5	8.0	560	12.7
16...	1110	36.0	--	7.5	8.0	560	12.6
16...	1111	42.0	--	7.5	8.0	559	12.5
16...	1113	48.0	--	6.7	7.8	558	12.0
16...	1114	54.0	--	6.5	7.8	558	11.9
16...	1115	60.0	--	6.2	7.8	558	11.5
JUN							
11...	1029	--	3.05	--	--	--	--
11...	1030	.10	--	6.9	8.2	564	19.9
11...	1031	6.00	--	6.9	8.2	564	19.5
11...	1032	12.0	--	6.8	8.2	564	19.4
11...	1033	18.0	--	6.7	8.1	565	19.3
11...	1034	24.0	--	6.4	8.0	568	18.5
11...	1035	30.0	--	6.3	8.0	572	17.7
11...	1036	36.0	--	5.7	7.8	572	16.1
11...	1037	42.0	--	5.4	7.8	573	15.9
11...	1038	48.0	--	5.1	7.7	573	15.2
11...	1039	54.0	--	4.4	7.6	571	14.0
11...	1040	56.0	--	4.2	7.5	571	13.6

ARKANSAS RIVER BASIN

PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

381548104453300 PUEBLO RESERVOIR SITE 6C--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SAM- PLING DEPTH (FEET) (00003)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
JUL							
22...	1109	--	1.68	--	--	--	--
22...	1110	.10	--	6.7	8.2	589	24.8
22...	1111	6.00	--	6.7	8.2	589	24.5
22...	1112	12.0	--	6.4	8.2	589	24.3
22...	1113	18.0	--	6.2	8.1	590	24.1
22...	1114	24.0	--	6.0	8.1	590	24.1
22...	1115	30.0	--	1.1	7.4	592	22.3
22...	1117	36.0	--	.6	7.3	593	21.8
22...	1118	42.0	--	.4	7.3	596	21.1
22...	1120	48.0	--	.2	7.2	598	20.5
22...	1122	52.0	--	.0	7.2	600	20.0
AUG							
27...	1224	--	1.22	--	--	--	--
27...	1225	.10	--	7.2	8.4	636	22.4
27...	1226	6.00	--	7.0	8.4	636	22.4
27...	1228	12.0	--	7.0	8.4	636	22.4
27...	1229	18.0	--	6.7	8.4	637	22.4
27...	1230	24.0	--	6.5	8.3	636	22.2
27...	1231	30.0	--	6.3	8.3	636	22.0
27...	1232	36.0	--	4.3	8.0	637	21.8
27...	1233	42.0	--	3.8	7.9	638	21.6
27...	1235	45.0	--	3.5	7.9	638	21.6
SEP							
26...	1029	--	.76	--	--	--	--
26...	1030	.10	--	6.8	8.2	638	19.1
26...	1031	6.00	--	6.8	8.2	639	19.0
26...	1032	12.0	--	6.6	8.2	639	18.9
26...	1033	18.0	--	6.6	8.2	639	18.9
26...	1034	24.0	--	6.6	8.2	639	18.9
26...	1035	30.0	--	6.7	8.2	639	18.9
26...	1036	36.0	--	6.8	8.2	639	18.8
26...	1037	40.0	--	6.9	8.2	639	18.8
26...	1038	44.0	--	6.8	8.2	639	18.8

PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

WATER-QUALITY RECORDS

381602104435200 PUEBLO RESERVOIR SITE 7B

LOCATION (REVISED).--Lat 38°16'02", long 104°43'52", in SE¹/₄ NW¹/₄ sec.36, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, at approximate center of transect approximately 0.3 mi downstream from Boggs Creek, 0.4 mi upstream from Pueblo Dam on Arkansas River, and 6.8 mi west of the Pueblo County Courthouse.

PERIOD OF RECORD.--June 1988 to current year.

REMARKS.--Chlorophyll samples were composited from samples collected at the surface, at the transparency depth (secchi disk), and at twice the transparency depth. Additional water-quality data were collected as part of a water-quality assessment of drought conditions and are also published in the "Drought Synoptic Sampling" section of this report.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SAM- PLING DEPTH (FEET) (00003)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT							
10...	0949	--	1.10	--	--	--	--
10...	0951	.10	--	6.6	8.0	471	17.6
10...	0952	3.00	--	6.6	8.0	471	17.6
10...	0953	6.00	--	6.6	8.0	471	17.6
10...	0954	9.00	--	6.5	8.0	471	17.6
10...	0955	12.0	--	6.5	8.0	471	17.6
10...	0956	15.0	--	6.5	8.0	471	17.6
10...	0957	18.0	--	6.5	8.0	472	17.6
10...	0958	21.0	--	6.5	8.0	472	17.6
10...	0959	24.0	--	6.5	8.0	472	17.6
10...	1000	27.0	--	6.5	8.0	472	17.6
10...	1001	30.0	--	6.5	8.0	472	17.6
10...	1002	33.0	--	6.5	8.0	472	17.6
10...	1003	36.0	--	6.5	8.0	472	17.6
10...	1005	39.0	--	6.5	8.0	472	17.6
10...	1006	42.0	--	6.5	8.0	473	17.6
10...	1007	45.0	--	6.4	8.0	473	17.6
10...	1008	48.0	--	6.4	8.0	473	17.6
10...	1009	51.0	--	6.4	8.0	473	17.6
10...	1010	54.0	--	6.4	8.0	473	17.6
10...	1011	57.0	--	6.4	8.0	473	17.6
10...	1012	60.0	--	6.4	8.0	473	17.6
10...	1013	63.0	--	6.4	8.0	473	17.6
10...	1014	66.0	--	6.4	8.0	474	17.6
10...	1015	69.0	--	6.3	8.0	475	17.6
10...	1016	72.0	--	6.3	8.0	475	17.6
10...	1017	75.0	--	6.3	8.0	476	17.5
10...	1018	78.0	--	6.3	8.0	477	17.5
10...	1020	80.0	--	6.3	8.0	477	17.5
APR							
09...	0944	--	2.13	--	--	--	--
09...	1001	.10	--	8.6	8.3	525	7.5
09...	1006	3.00	--	8.7	8.3	525	7.5
09...	1008	6.00	--	8.8	8.3	525	7.4
09...	1009	9.00	--	8.9	8.3	525	7.3
09...	1011	12.0	--	8.9	8.3	525	7.0
09...	1012	15.0	--	8.9	8.3	524	6.6
09...	1014	18.0	--	8.9	8.3	524	6.5
09...	1015	21.0	--	8.9	8.3	524	6.5
09...	1017	24.0	--	8.9	8.3	524	6.4
09...	1018	27.0	--	8.8	8.3	525	6.4
09...	1020	30.0	--	8.8	8.3	525	6.4
09...	1021	33.0	--	8.8	8.3	525	6.4
09...	1023	36.0	--	8.8	8.3	525	6.3
09...	1024	39.0	--	8.7	8.2	525	6.2
09...	1026	42.0	--	8.7	8.2	525	6.2
09...	1027	45.0	--	8.7	8.2	525	6.2
09...	1029	48.0	--	8.7	8.2	526	6.2
09...	1030	51.0	--	8.6	8.2	526	6.2
09...	1032	54.0	--	8.6	8.2	526	6.1
09...	1033	57.0	--	8.6	8.2	526	6.1
09...	1035	60.0	--	8.6	8.2	526	6.1
09...	1037	63.0	--	8.6	8.2	526	6.0
09...	1038	66.0	--	8.6	8.2	526	6.0
09...	1039	69.0	--	8.6	8.2	526	5.9
09...	1041	72.0	--	8.6	8.2	526	5.9
09...	1042	75.0	--	8.5	8.2	526	5.8
09...	1043	78.0	--	8.5	8.2	526	5.8
09...	1045	81.0	--	8.5	8.2	527	5.8
09...	1046	84.0	--	8.5	8.2	527	5.8
09...	1047	87.0	--	8.5	8.2	527	5.8
09...	1048	90.0	--	8.4	8.2	527	5.8
09...	1050	93.0	--	8.4	8.2	527	5.7

ARKANSAS RIVER BASIN

PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

381602104435200 PUEBLO RESERVOIR SITE 7B--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SAM- PLING DEPTH (FEET) (00003)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
MAY							
16...	0944	--	7.32	--	--	--	--
16...	0945	.10	--	7.8	7.9	564	14.5
16...	0947	3.00	--	7.9	8.0	562	14.0
16...	0948	6.00	--	7.9	8.0	562	13.9
16...	0949	9.00	--	7.9	8.0	562	13.9
16...	0950	12.0	--	7.9	8.0	563	13.8
16...	0951	15.0	--	7.9	8.0	562	13.8
16...	0952	18.0	--	7.8	8.0	562	13.7
16...	0954	21.0	--	7.8	8.0	562	13.5
16...	0956	24.0	--	7.7	7.9	560	13.2
16...	0958	27.0	--	7.6	7.9	560	13.1
16...	0959	30.0	--	7.6	7.9	560	12.9
16...	1000	33.0	--	7.5	7.9	560	12.8
16...	1001	36.0	--	7.5	7.9	560	12.8
16...	1002	39.0	--	7.5	7.9	559	12.6
16...	1003	42.0	--	7.5	7.9	559	12.4
16...	1004	45.0	--	7.4	7.9	562	12.3
16...	1006	48.0	--	7.3	7.9	557	11.9
16...	1007	51.0	--	7.1	7.9	558	11.8
16...	1008	54.0	--	7.0	7.9	556	11.8
16...	1009	57.0	--	7.0	7.8	555	11.6
16...	1010	60.0	--	6.9	7.8	555	11.5
16...	1011	63.0	--	6.9	7.8	554	11.4
16...	1012	66.0	--	6.8	7.8	554	11.3
16...	1013	69.0	--	6.8	7.8	554	11.3
16...	1014	72.0	--	6.8	7.8	554	11.2
16...	1015	75.0	--	6.8	7.8	554	11.2
16...	1016	78.0	--	6.7	7.8	554	11.2
16...	1017	81.0	--	6.7	7.8	554	11.2
16...	1018	84.0	--	6.7	7.8	554	11.2
16...	1020	87.0	--	6.5	7.8	555	11.1
JUN							
11...	0843	--	3.51	--	--	--	--
11...	0855	.10	--	6.6	8.1	571	19.3
11...	0856	3.00	--	6.9	8.1	571	19.3
11...	0857	6.00	--	6.9	8.1	572	18.9
11...	0858	9.00	--	7.0	8.1	572	18.7
11...	0859	12.0	--	7.0	8.1	572	18.6
11...	0901	15.0	--	6.8	8.1	572	18.6
11...	0902	18.0	--	6.5	8.1	572	18.6
11...	0903	21.0	--	6.4	8.1	573	18.5
11...	0904	24.0	--	6.4	8.1	573	18.4
11...	0905	27.0	--	6.3	8.0	573	18.3
11...	0906	30.0	--	6.2	8.0	573	18.2
11...	0907	33.0	--	6.2	8.0	573	18.1
11...	0908	36.0	--	5.9	8.0	574	17.1
11...	0910	39.0	--	5.4	7.8	572	15.9
11...	0912	42.0	--	5.3	7.8	572	15.7
11...	0914	45.0	--	5.3	7.8	572	15.5
11...	0917	48.0	--	5.2	7.8	572	15.5
11...	0918	51.0	--	5.0	7.7	572	14.6
11...	0919	54.0	--	4.9	7.7	571	14.2
11...	0920	57.0	--	4.8	7.6	571	13.9
11...	0921	60.0	--	4.7	7.6	570	13.7
11...	0922	63.0	--	4.6	7.6	569	13.5
11...	0923	66.0	--	4.5	7.6	569	13.3
11...	0924	69.0	--	4.4	7.6	568	13.2
11...	0925	72.0	--	4.4	7.6	568	13.2
11...	0926	75.0	--	4.4	7.6	568	13.2
11...	0927	78.0	--	4.1	7.5	568	13.0
11...	0928	81.0	--	3.9	7.5	568	12.9
11...	0929	82.0	--	3.6	7.5	568	12.8

PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

381602104435200 PUEBLO RESERVOIR SITE 7B--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SAM- PLING DEPTH (FEET) (00003)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
JUL							
22...	0859	--	2.44	--	--	--	--
22...	0929	.10	--	6.5	8.2	587	24.3
22...	0931	3.00	--	6.6	8.2	586	24.2
22...	0932	6.00	--	6.7	8.2	587	24.1
22...	0933	9.00	--	6.8	8.2	587	24.0
22...	0934	12.0	--	6.7	8.2	587	24.0
22...	0935	15.0	--	6.7	8.2	587	24.0
22...	0936	18.0	--	6.7	8.2	587	23.9
22...	0937	21.0	--	6.5	8.1	588	23.7
22...	0938	24.0	--	6.4	8.1	588	23.6
22...	0939	27.0	--	5.9	8.0	589	23.3
22...	0940	30.0	--	5.0	7.8	591	23.1
22...	0942	33.0	--	2.8	7.5	594	21.9
22...	0943	36.0	--	2.3	7.4	594	21.6
22...	0944	39.0	--	2.1	7.4	594	21.5
22...	0946	42.0	--	1.9	7.4	596	21.4
22...	0947	45.0	--	1.6	7.3	596	20.9
22...	0948	48.0	--	1.3	7.3	596	20.4
22...	0949	51.0	--	1.2	7.3	596	20.2
22...	0950	54.0	--	1.1	7.3	596	20.0
22...	0951	57.0	--	1.0	7.3	591	19.0
22...	0952	60.0	--	.9	7.2	589	18.4
22...	0953	63.0	--	.6	7.2	586	17.6
22...	0954	66.0	--	.3	7.2	583	16.7
22...	0955	69.0	--	.1	7.1	583	16.4
22...	0957	72.0	--	.0	7.1	582	16.2
AUG							
27...	0859	--	2.44	--	--	--	--
27...	1105	.10	--	5.9	8.1	634	21.5
27...	1107	3.00	--	5.9	8.1	634	21.5
27...	1108	6.00	--	5.9	8.1	634	21.5
27...	1109	9.00	--	5.9	8.1	634	21.5
27...	1110	12.0	--	5.9	8.1	634	21.5
27...	1111	15.0	--	5.9	8.1	634	21.5
27...	1112	18.0	--	5.8	8.1	634	21.5
27...	1113	21.0	--	5.8	8.1	634	21.5
27...	1114	24.0	--	5.8	8.1	634	21.5
27...	1116	27.0	--	5.8	8.1	634	21.5
27...	1117	30.0	--	5.8	8.1	634	21.5
27...	1118	33.0	--	5.6	8.1	634	21.5
27...	1119	36.0	--	5.6	8.1	634	21.5
27...	1120	39.0	--	5.5	8.1	634	21.5
27...	1121	42.0	--	4.8	8.0	634	21.5
27...	1122	45.0	--	4.4	8.0	634	21.4
27...	1123	48.0	--	3.5	7.9	634	21.3
27...	1124	51.0	--	3.4	7.9	634	21.3
27...	1125	54.0	--	3.2	7.8	634	21.3
27...	1126	57.0	--	3.0	7.8	634	21.2
27...	1127	60.0	--	2.8	7.8	634	21.2
27...	1128	63.0	--	2.5	7.8	633	21.1
27...	1129	66.0	--	1.8	7.7	632	21.0
27...	1130	69.0	--	1.5	7.7	632	20.9
SEP							
26...	0859	--	1.07	--	--	--	--
26...	0916	.10	--	5.9	8.0	637	18.6
26...	0917	3.00	--	5.9	8.0	637	18.8
26...	0918	6.00	--	5.9	8.0	637	18.8
26...	0919	9.00	--	5.9	8.0	637	18.8
26...	0920	12.0	--	5.9	8.0	637	18.8
26...	0921	15.0	--	5.9	8.0	637	18.8
26...	0922	18.0	--	5.9	8.0	637	18.8
26...	0923	21.0	--	5.8	8.0	637	18.8
26...	0924	24.0	--	5.8	8.0	637	18.8
26...	0925	27.0	--	5.8	8.0	637	18.8
26...	0926	30.0	--	5.8	8.0	637	18.8
26...	0927	33.0	--	5.8	8.0	637	18.8
26...	0928	36.0	--	5.8	8.0	637	18.8
26...	0929	39.0	--	5.8	8.0	637	18.8
26...	0931	42.0	--	5.8	8.0	637	18.8
26...	0932	45.0	--	5.8	8.0	637	18.8
26...	0933	48.0	--	5.8	8.0	637	18.8
26...	0934	51.0	--	5.8	8.0	637	18.8
26...	0935	54.0	--	5.8	8.0	637	18.8
26...	0936	57.0	--	5.8	8.0	637	18.8
26...	0937	60.0	--	5.8	8.0	637	18.8
26...	0938	63.0	--	5.8	8.0	637	18.8
26...	0939	66.0	--	5.7	8.0	637	18.8
26...	0940	69.0	--	5.6	8.0	637	18.8

ARKANSAS RIVER BASIN

PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

381602104435200 PUEBLO RESERVOIR SITE 7B--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SAM-PLING DEPTH (FEET) (00003)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
OCT													
10...	0949	--	1.10	--	--	--	--	--	--	--	--	--	--
10...	0950	.10	--	--	6.6	8.0	471	17.6	.021	--	.178	.005	E.004
10...	1025	79.0	--	--	6.3	8.0	477	17.5	.031	--	.182	.005	.006
APR													
09...	0944	--	2.13	--	--	--	--	--	--	--	--	--	--
09...	0945	.10	--	--	8.6	8.3	525	7.5	.029	--	.287	.004	E.003
09...	1000	92.0	--	--	8.4	8.2	528	5.7	.026	--	.291	.004	E.004
09...	1135	--	--	4.7	--	--	--	--	--	--	--	--	--
JUN													
11...	0843	--	3.51	--	--	--	--	--	--	--	--	--	--
11...	0845	.10	--	--	6.6	8.1	571	19.3	.043	--	.261	.006	.006
11...	0900	81.0	--	--	3.9	7.5	568	12.9	.049	--	.295	.009	.006
11...	0930	--	--	3.5	--	--	--	--	--	--	--	--	--
JUL													
22...	0859	--	2.44	--	--	--	--	--	--	--	--	--	--
22...	0900	.10	--	--	6.5	8.2	587	24.3	<.015	.17	.209	.010	E.003
22...	0930	18.0	--	--	6.7	8.2	587	23.9	E.013	.18	.384	.011	E.003
22...	0945	54.0	--	--	1.1	7.3	596	20.0	.025	.19	.299	.011	E.003
22...	1015	72.0	--	--	.0	7.1	582	16.2	E.012	.20	.330	.011	E.003
22...	1045	--	--	1.7	--	--	--	--	--	--	--	--	--
AUG													
27...	0859	--	2.44	--	--	--	--	--	--	--	--	--	--
27...	0900	.10	--	--	5.9	8.1	634	21.5	E.008	.17	.169	.003	.005
27...	0915	67.0	--	--	1.8	7.7	632	21.0	E.010	.19	.198	.003	.006
27...	1115	--	--	2.2	--	--	--	--	--	--	--	--	--
27...	1145	17.0	--	--	5.8	8.1	634	21.5	E.011	.17	.174	.003	.005
27...	1200	52.0	--	--	3.4	7.9	634	21.3	E.009	.19	.187	.003	.005
SEP													
26...	0859	--	1.07	--	--	--	--	--	--	--	--	--	--
26...	0900	.10	--	--	5.9	8.0	637	18.6	.022	.22	.172	.004	.007
26...	0915	68.0	--	--	5.6	8.0	637	18.8	.022	.21	.171	.004	.007
26...	0945	17.0	--	--	5.8	8.0	637	18.8	.024	.20	.171	.004	.007
26...	1000	52.0	--	--	5.8	8.0	637	18.8	.024	.21	.177	.005	.006
26...	1015	--	--	8.3	--	--	--	--	--	--	--	--	--

Date	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	PHEO-PHYTIN A, PHYTON (UG/L) (62360)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
OCT						
10...	--	--	--	--	--	--
10...	<.007	.016	--	3.1	2.9	--
10...	<.007	.043	V2.6	--	--	--
APR						
09...	--	--	--	--	--	--
09...	<.007	.007	--	--	--	--
09...	<.007	.012	--	--	--	--
09...	--	--	--	1.5	4.3	--
JUN						
11...	--	--	--	--	--	--
11...	<.007	.009	V2.7	--	--	--
11...	<.007	.011	V2.2	--	--	--
11...	--	--	--	.5	2.6	--
JUL						
22...	--	--	--	--	--	--
22...	<.007	.009	--	--	--	<2.0
22...	<.007	.012	--	--	--	E.9
22...	<.007	.011	--	--	--	3.3
22...	<.007	.013	--	--	--	E2.1
22...	--	--	--	.8	4.9	--
AUG						
27...	--	--	--	--	--	--
27...	<.007	.013	V2.5	--	--	<2.0
27...	<.007	.031	V2.5	--	--	33.3
27...	--	--	--	2.1	9.3	--
27...	<.007	.013	--	--	--	<2.0
27...	<.007	.015	--	--	--	8.1
SEP						
26...	--	--	--	--	--	--
26...	<.007	.017	V2.7	--	--	--
26...	<.007	--	V2.6	--	--	--
26...	<.007	.018	--	--	--	--
26...	<.007	.017	--	--	--	--
26...	--	--	--	2.5	2.9	--

E Estimated laboratory analysis value.

V Analyte was detected in both the environmental sample and the associated blanks.

07099400 ARKANSAS RIVER ABOVE PUEBLO, CO

LOCATION.--Lat 38°16'18", long 104°43'03", in NE¹/₄NE¹/₄ sec.36, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, on left bank 200 ft downstream from northeast corner of Arkansas River bridge, 0.4 mi downstream from Pueblo Dam, and 7 mi west of Pueblo.

DRAINAGE AREA.--4,670 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1965 to current year. Statistical summary computed for 1975 to current year subsequent to completion of Pueblo Reservoir.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,740 ft above sea level, from topographic map. Prior to Mar. 23, 1967, at site 730 ft upstream at datum 2.23 ft higher. Mar. 24, 1967 to May 23 1974 at present site at datum 1.00 ft higher. May 24, 1974 to Feb. 24, 1975, at site 2,000 ft downstream, at different datum. Feb. 25, 1975 to Sept. 30, 2001, at or within 50 ft of present location at datum 1.00 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, power developments, transbasin and transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants. Flow completely regulated by Pueblo Reservoir (station 07099350) 0.4 mi upstream since Jan. 9, 1974.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	186	103	106	116	109	195	102	228	348	34	e0.58
2	89	178	103	106	115	109	241	102	316	347	28	e0.58
3	91	164	103	107	116	108	265	208	463	348	19	e0.58
4	105	164	103	107	112	107	265	543	543	348	19	e0.58
5	122	172	103	107	107	107	265	513	580	303	19	e0.58
6	122	229	103	107	107	108	264	531	600	342	19	e0.58
7	127	299	103	107	107	108	264	567	580	531	19	e0.58
8	175	392	103	113	106	101	284	586	649	651	18	e0.58
9	306	389	103	118	106	96	259	646	870	459	18	e0.58
10	269	334	101	118	106	96	234	650	769	248	18	e0.58
11	255	278	101	116	107	96	234	601	448	196	18	e0.58
12	265	206	102	114	107	96	234	546	375	196	18	e0.58
13	271	152	102	112	107	145	234	502	303	286	18	e0.58
14	272	124	101	114	108	198	205	395	194	182	18	e28
15	297	99	102	114	107	123	144	226	175	268	18	e28
16	324	100	102	114	107	141	109	242	175	368	18	e28
17	318	100	102	114	107	156	109	247	173	303	19	e24
18	308	100	102	114	107	144	109	277	188	303	18	e0.58
19	254	100	103	113	107	390	109	301	219	302	18	e0.58
20	110	100	104	113	107	402	132	270	240	305	18	e0.58
21	119	100	104	113	108	117	140	322	325	287	18	e0.58
22	151	100	105	113	108	112	140	399	347	263	18	e0.58
23	192	100	105	114	107	111	140	361	326	230	18	e0.58
24	211	100	105	114	108	115	141	384	335	262	18	e0.58
25	221	100	105	114	109	121	163	418	352	288	18	e0.57
26	202	100	105	114	110	150	159	691	352	186	16	e0.57
27	166	103	105	114	108	191	113	599	351	157	12	e0.57
28	182	102	105	114	108	210	102	227	366	157	e0.58	e0.56
29	180	102	106	115	---	161	102	214	384	128	e0.58	e0.56
30	162	102	106	115	---	120	101	169	362	70	e0.58	e0.56
31	173	---	106	115	---	152	---	165	---	47	e0.58	---
TOTAL	6139	4875	3206	3489	3035	4500	5456	12004	11588	8709	512.32	122.99
MEAN	198	162	103	113	108	145	182	387	386	281	16.5	4.10
MAX	324	392	106	118	116	402	284	691	870	651	34	28
MIN	89	99	101	106	106	96	101	102	173	47	0.58	0.56
AC-FT	12180	9670	6360	6920	6020	8930	10820	23810	22980	17270	1020	244

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2002, BY WATER YEAR (WY)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	349	254	158	172	208	317	587	1163	2309	1602	1014	442																
MAX	1103	505	553	558	837	718	1389	2564	4219	4110	2716	1040																
(WY)	1985	1985	1987	1985	1985	1985	1985	1984	1980	1995	1984	1982																
MIN	121	77.0	58.8	55.6	55.9	81.1	125	374	386	281	16.5	4.10																
(WY)	1979	1979	1980	1980	1979	1978	1978	1978	2002	2002	2002	2002																

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1975 - 2002

ANNUAL TOTAL	206086	63636.31	
ANNUAL MEAN	565	174	a716
HIGHEST ANNUAL MEAN			1227
LOWEST ANNUAL MEAN			174
HIGHEST DAILY MEAN	2820	May 30	870 Jun 9
LOWEST DAILY MEAN	89	Oct 2	0.56 Sep 28
ANNUAL SEVEN-DAY MINIMUM	96	Sep 27	0.57 Sep 24
MAXIMUM PEAK FLOW			886 Jun 9
MAXIMUM PEAK STAGE			2.76 Jun 9
ANNUAL RUNOFF (AC-FT)	408800	126200	518900
10 PERCENT EXCEEDS	1530	364	1800
50 PERCENT EXCEEDS	226	114	380
90 PERCENT EXCEEDS	101	18	90

- e Estimated.
- a Average discharge for 8 years (water years 1966-73), 643 ft³/s; 465,900 acre-ft/yr, prior to completion of Pueblo Dam.
- b Also the maximum daily discharge for period of record.
- c Also occurred Sep 29-30, 2002. Also minimum daily discharge for period of record.
- d Maximum discharge for period of record, 10,100 ft³/s, Aug 1, 1966, from rating curve extended above 1,600 ft³/s, on basis of slope-area measurement of peak flow.
- f Datum then in use; maximum gage height, 7.57 ft, Jun 14, 1985, datum then in use; maximum gage height for period of record, 13.12 ft, Aug 1, 1966, site and datum then in use.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1965 to September 1970, December 1985 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1985 to current year.
 WATER TEMPERATURE: December 1985 to current year.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry.

REMARKS.--Daily specific-conductance records are good except for June 19-20, July 29-31, Aug. 2, 6, 8, and Aug. 27 to Sept. 30, which are fair. Daily water-temperature records are good except for June 19-20, July 31, Aug. 2, 6, 8, which are fair. Daily data that are not published are either missing or of unacceptable quality. Specific conductance data may not be representative of the river at the site during periods of transient hydrologic conditions caused by abrupt flow changes from Pueblo Reservoir. Additional water-quality data were collected as part of a water-quality assessment of drought conditions and are published in the "Drought Synoptic Sampling" section of this report.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,670 microsiemens/cm, Sept. 30, 2002; minimum, 223 microsiemens/cm, July 13, 1986.
 WATER TEMPERATURE: Maximum, 26.9°C, Aug. 31, Sept. 5, 2002; minimum, 1.1°C, Jan. 30, 1995.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,670 microsiemens/cm, Sept. 30; minimum, 476 microsiemens/cm, Oct. 9.
 WATER TEMPERATURE: Maximum, 26.9°C, Aug. 31, Sept. 5; minimum, 2.0°C, Feb. 13.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	NITROGEN, AMMONIA SOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITROGEN, NO2+NO3 SOLVED (MG/L AS N) (00631)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOSPHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOSPHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOSPHORUS TOTAL (MG/L AS P) (00665)
OCT													
11...	1415	258	8.2	8.3	476	17.5	.045	--	.174	.008	.006	<.007	.035
APR													
10...	1330	252	10.8	8.5	535	7.0	.030	--	.289	.004	E.004	<.007	.010
JUN													
10...	1315	648	8.3	8.1	570	14.5	.066	--	.324	.012	.008	<.007	.013
JUL													
22...	1505	298	10.2	8.1	606	19.0	.05	--	.40	E.007	--	<.02	.022
AUG													
27...	1110	9.5	6.4	8.1	657	20.5	.040	.21	.241	.003	.011	<.007	.022

Date	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)
OCT		
11...	2.5	--
APR		
10...	2.8	--
JUN		
10...	2.5	--
JUL		
22...	2.3	49.5
AUG		
27...	2.5	162

E Estimated laboratory analysis value.

WATER-QUALITY DATA COLLECTED AS PART OF PREFERRED STORAGE OPTIONS PLAN, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC TIT 4.5 LAB (MG/L AS CACO3) (90410)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)
JAN													
09...	1020	118	11.8	8.4	526	3.5	60.7	17.1	2.45	24.4	124	8.63	.6
MAR													
11...	1030	96	11.7	8.1	528	5.0	59.2	17.1	2.52	25.7	125	8.65	.6
MAY													
21...	1000	261	12.3	8.4	557	13.0	63.0	18.9	2.71	28.2	128	9.88	.70
JUL													
22...	1505	298	10.2	8.1	606	19.0	70.7	19.6	3.00	29.7	--	10.2	.58

ARKANSAS RIVER BASIN

07099400 ARKANSAS RIVER ABOVE PUEBLO, CO--Continued

WATER-QUALITY DATA COLLECTED AS PART OF PREFERRED STORAGE OPTIONS PLAN, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
JAN 09...	141
MAR 11...	139
MAY 21...	147
JUL 22...	158

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	527	491	506	531	523	526	595	571	578	570	567	568
2	529	498	513	536	524	529	590	572	578	570	564	567
3	543	501	518	535	527	533	590	575	581	572	566	569
4	537	494	506	535	529	533	593	577	584	575	569	572
5	501	493	497	534	527	532	589	574	581	576	569	572
6	510	496	502	531	522	527	588	575	580	574	568	571
7	506	489	497	534	520	526	592	576	579	581	573	577
8	501	479	492	535	522	527	593	575	580	580	564	571
9	484	476	480	537	528	532	609	577	590	569	561	565
10	491	481	486	534	528	532	594	584	588	568	563	565
11	506	483	493	536	530	533	600	581	589	570	562	566
12	503	489	495	547	531	538	590	580	585	570	565	568
13	508	495	501	586	537	558	591	579	584	573	566	569
14	502	495	498	614	557	572	599	584	589	570	563	567
15	512	496	504	614	596	604	592	579	583	564	560	562
16	514	498	506	609	592	600	586	578	582	563	557	560
17	512	503	507	605	587	596	589	577	581	568	559	563
18	524	507	515	600	573	586	586	578	582	570	562	565
19	649	505	537	598	577	585	586	576	579	565	559	562
20	613	535	560	603	574	585	582	574	578	565	560	563
21	543	529	535	593	573	583	587	577	580	568	560	564
22	538	508	522	592	573	582	582	574	577	566	559	563
23	517	509	513	593	574	583	578	573	576	562	558	560
24	515	509	512	587	570	576	577	573	575	563	559	561
25	519	511	514	589	571	577	575	571	572	566	561	563
26	529	510	520	588	572	577	573	569	571	566	560	563
27	536	522	528	583	568	575	574	569	572	564	560	562
28	536	525	531	586	570	577	577	571	573	565	560	562
29	548	534	540	590	572	579	572	568	570	563	557	560
30	544	539	542	589	572	578	570	567	569	564	560	562
31	543	522	533	---	---	---	572	568	570	566	562	564
MONTH	649	476	513	614	520	561	609	567	579	581	557	565

ARKANSAS RIVER BASIN

07099400 ARKANSAS RIVER ABOVE PUEBLO, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	567	561	565	581	568	574	555	544	550	678	597	619
2	566	562	564	576	561	569	551	543	548	632	600	613
3	569	563	566	576	565	571	558	546	551	629	569	595
4	599	564	573	582	567	574	557	549	552	569	563	566
5	577	566	572	585	572	578	560	548	552	571	565	568
6	577	562	568	587	577	581	558	549	552	579	567	571
7	573	563	568	589	575	581	552	548	551	580	574	577
8	580	565	571	645	576	593	555	548	552	580	570	575
9	576	562	568	591	577	582	558	549	554	578	568	573
10	566	559	563	596	575	583	558	552	555	583	574	577
11	570	560	564	599	574	587	564	551	556	588	576	580
12	568	560	563	601	576	590	562	551	555	598	580	587
13	568	559	564	604	543	571	562	552	557	620	583	596
14	596	563	568	553	545	548	565	555	559	646	590	604
15	570	560	564	647	552	591	642	554	587	614	585	599
16	567	559	563	572	558	565	599	584	592	624	574	598
17	570	560	564	570	548	556	596	581	588	634	584	603
18	570	559	564	587	549	569	607	585	593	605	570	588
19	568	561	564	582	538	560	608	587	595	591	578	584
20	573	561	565	653	536	584	605	571	580	608	580	594
21	569	559	563	640	603	619	584	568	574	604	574	589
22	576	560	568	615	598	608	587	573	578	596	588	592
23	575	568	571	605	579	586	588	573	579	598	588	592
24	576	564	570	596	579	587	585	579	582	594	560	587
25	580	564	570	588	574	581	583	564	572	601	587	593
26	574	563	568	577	548	565	607	568	580	591	579	582
27	576	564	570	557	548	552	653	579	614	592	583	587
28	580	566	573	558	548	552	680	613	640	637	590	605
29	---	---	---	599	546	573	697	610	639	610	586	593
30	---	---	---	595	579	586	624	596	611	642	588	608
31	---	---	---	586	547	563	---	---	---	632	591	607
MONTH	599	559	567	653	536	577	697	543	575	678	560	590
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	599	582	590	613	599	604	---	---	---	1500	1230	1330
2	593	582	588	605	598	602	741	649	673	1380	1160	1290
3	592	583	587	616	599	604	748	674	691	1450	1120	1290
4	593	587	590	609	601	605	725	663	684	1500	1240	1370
5	594	586	590	610	601	606	773	667	695	1380	1190	1290
6	598	589	591	611	596	603	771	670	699	1350	1170	1270
7	605	589	593	611	595	601	---	---	---	1500	1230	1340
8	595	588	592	599	596	598	729	674	689	1480	1280	1370
9	590	586	588	627	599	610	739	667	689	1360	1180	1260
10	603	588	593	632	604	618	729	670	690	1380	1210	1310
11	634	594	607	628	611	618	722	670	691	1420	1160	1310
12	604	595	600	625	611	617	721	665	688	1450	1130	1340
13	630	598	608	635	600	615	731	671	691	1320	689	997
14	630	597	609	632	616	624	749	667	698	721	687	694
15	618	602	608	628	601	612	742	675	696	761	684	700
16	613	601	607	620	603	608	736	671	695	760	683	702
17	615	600	606	621	610	615	722	676	694	1180	684	823
18	609	598	603	622	609	615	718	677	694	1220	1080	1170
19	602	594	598	622	610	617	741	680	699	1360	1050	1190
20	605	596	601	631	613	622	732	683	699	1380	1130	1280
21	602	591	596	706	612	623	763	679	700	1450	1140	1260
22	598	595	596	658	612	624	738	679	702	1520	1200	1330
23	601	595	598	647	620	628	755	682	700	1430	1170	1300
24	605	595	598	628	612	618	763	686	704	1620	1280	1410
25	605	595	600	622	612	616	744	683	704	1500	1210	1360
26	604	595	600	755	617	692	759	689	710	1420	1160	1240
27	619	595	602	746	643	673	1140	691	839	1510	1320	1410
28	613	596	603	689	625	646	1340	1100	1220	1630	1330	1430
29	616	602	609	724	628	660	1430	1090	1210	1620	1340	1440
30	611	598	605	773	667	714	1310	1100	1210	1670	1240	1390
31	---	---	---	760	660	727	1340	1220	1270	---	---	---
MONTH	634	582	599	773	595	627	---	---	---	1670	683	1230

ARKANSAS RIVER BASIN

07099400 ARKANSAS RIVER ABOVE PUEBLO, CO--Continued

TEMPERATURE, WATER (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	20.6	18.6	19.3	13.4	12.5	12.8	8.9	7.4	7.8	3.8	3.1	3.3
2	20.8	18.4	19.4	13.2	12.3	12.6	8.9	7.4	7.8	4.1	2.6	3.2
3	20.7	18.5	19.2	13.2	12.2	12.5	8.5	6.9	7.5	3.9	2.3	2.9
4	20.2	18.2	18.9	13.0	12.0	12.4	8.4	6.5	7.1	3.5	2.8	3.2
5	18.6	18.0	18.2	13.0	12.0	12.3	7.9	6.5	7.1	3.9	2.6	3.2
6	19.4	17.7	18.3	12.9	12.0	12.3	8.3	6.7	7.2	3.9	2.5	3.0
7	18.9	17.6	18.0	12.7	12.0	12.3	7.7	6.5	6.9	4.6	3.0	3.6
8	18.8	17.6	18.0	12.5	11.8	12.1	7.6	6.0	6.6	4.0	3.0	3.4
9	18.5	17.3	17.8	12.4	11.8	12.0	7.9	6.0	6.6	4.0	2.9	3.2
10	17.9	17.1	17.5	12.3	11.6	11.8	7.6	5.8	6.4	3.9	2.8	3.2
11	17.6	16.6	17.0	12.1	11.4	11.7	7.4	5.7	6.2	4.1	2.7	3.1
12	17.0	16.4	16.6	12.1	11.2	11.5	6.3	5.3	5.8	4.1	2.7	3.1
13	16.9	16.0	16.4	11.8	11.1	11.4	6.7	5.0	5.6	4.0	2.6	3.1
14	16.7	15.6	16.1	12.1	10.9	11.3	6.6	5.2	5.7	3.9	2.5	3.0
15	16.0	15.2	15.5	12.6	10.7	11.3	6.5	5.1	5.5	3.8	2.4	2.9
16	15.8	15.0	15.3	12.4	10.6	11.2	6.5	5.0	5.5	3.7	2.4	2.8
17	15.6	14.9	15.1	12.3	10.6	11.1	6.7	4.8	5.5	3.9	2.4	2.9
18	15.4	14.6	14.9	12.3	10.2	10.9	6.2	4.8	5.3	3.8	2.3	2.8
19	15.2	14.1	14.7	11.9	10.1	10.7	6.1	4.5	5.1	3.7	2.2	2.7
20	15.6	13.8	14.4	11.9	9.8	10.5	5.7	4.5	4.9	3.6	2.4	2.8
21	14.9	13.9	14.3	11.6	9.7	10.3	5.9	4.3	4.9	4.0	2.4	3.0
22	15.0	13.9	14.3	11.3	9.8	10.3	5.7	4.3	4.8	4.0	2.5	3.0
23	14.7	13.9	14.2	10.5	9.6	10.1	5.6	4.1	4.5	3.2	2.6	2.8
24	14.6	13.8	14.1	10.9	9.2	9.8	5.4	3.9	4.4	3.6	2.2	2.7
25	14.3	13.5	13.8	10.6	9.1	9.5	5.0	3.7	4.2	4.0	2.2	2.9
26	14.1	13.0	13.5	10.3	8.7	9.2	5.1	3.8	4.2	3.8	2.6	3.0
27	14.0	12.9	13.2	9.8	8.2	8.8	5.0	3.7	4.1	4.1	2.4	2.9
28	13.7	12.9	13.1	9.6	7.8	8.5	5.0	3.6	4.2	3.7	2.7	3.1
29	13.3	12.5	12.8	9.2	7.7	8.1	4.4	3.6	3.9	3.1	2.5	2.8
30	13.1	12.4	12.6	9.1	7.5	8.0	3.8	3.2	3.5	3.4	2.5	2.8
31	13.3	12.3	12.7	---	---	---	4.4	3.2	3.7	3.9	2.2	2.8
MONTH	20.8	12.3	15.8	13.4	7.5	10.9	8.9	3.2	5.6	4.6	2.2	3.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	3.8	2.2	2.7	3.5	2.9	3.1	5.9	5.0	5.4	13.3	9.9	10.9
2	3.6	2.3	2.7	5.0	2.3	3.3	5.9	5.4	5.6	12.6	10.2	10.9
3	4.1	2.3	3.0	4.8	2.4	3.2	6.2	5.3	5.6	12.3	10.3	11.2
4	4.5	2.4	3.1	5.2	2.2	3.5	6.3	5.3	5.7	11.9	10.7	11.2
5	4.2	2.7	3.2	5.4	3.0	4.0	6.4	5.4	5.8	12.0	10.7	11.2
6	3.7	2.3	2.7	5.9	3.3	4.3	6.3	5.5	5.8	11.9	10.7	11.3
7	4.1	2.1	2.8	5.8	3.7	4.5	6.9	5.9	6.3	11.9	10.8	11.2
8	4.3	2.2	2.9	6.4	3.5	4.5	6.9	5.8	6.3	11.9	10.9	11.2
9	3.1	2.1	2.4	6.2	3.2	4.3	6.8	5.8	6.2	11.9	10.8	11.4
10	4.1	2.1	2.7	6.7	3.4	4.7	6.9	5.9	6.3	12.4	11.0	11.8
11	3.6	2.1	2.6	7.1	4.1	5.3	7.1	6.1	6.5	12.2	11.1	11.5
12	3.9	2.2	2.7	6.0	3.8	4.7	7.0	6.0	6.4	12.1	11.3	11.6
13	4.2	2.0	2.8	6.0	3.7	4.2	7.4	6.2	6.7	12.8	11.2	11.9
14	3.6	2.3	2.7	4.7	3.6	3.9	7.5	6.2	6.7	12.4	11.2	11.7
15	4.2	2.2	2.9	4.5	3.6	3.9	8.5	6.3	7.1	13.1	11.0	11.8
16	4.4	2.2	3.0	5.1	3.5	4.0	8.6	6.4	7.5	13.3	11.2	11.9
17	4.6	2.5	3.2	5.0	3.7	4.1	9.4	6.7	7.8	12.9	11.5	11.9
18	4.6	2.7	3.4	5.4	3.6	4.1	9.3	7.1	8.1	13.3	11.3	12.0
19	4.8	3.0	3.5	5.4	3.7	4.1	10.1	7.1	8.4	13.1	11.4	12.0
20	4.6	2.8	3.5	5.6	3.8	4.4	8.5	7.9	8.2	12.6	11.5	12.0
21	5.0	2.9	3.7	5.3	3.9	4.3	10.4	8.0	9.1	13.0	11.6	12.2
22	5.3	2.9	3.8	5.8	3.8	4.4	10.5	9.0	9.6	13.4	12.2	12.8
23	5.4	3.4	4.1	5.9	3.8	4.7	11.0	9.3	10	13.1	12.2	12.5
24	5.4	3.6	4.3	5.1	4.1	4.5	10.8	9.2	9.9	12.9	12.2	12.5
25	4.6	2.8	3.6	5.5	4.0	4.5	10.6	9.2	9.6	13.4	12.2	12.7
26	4.8	2.8	3.5	5.9	4.1	4.7	10.5	9.2	9.7	13.5	12.2	13.0
27	4.9	2.8	3.6	6.0	4.2	5.0	12.0	9.4	10.5	13.3	12.5	12.9
28	5.4	3.0	3.9	6.1	4.6	5.3	12.5	9.9	10.8	13.7	12.4	12.9
29	---	---	---	6.7	5.1	5.6	12.4	9.8	10.7	13.6	12.4	12.9
30	---	---	---	7.4	4.9	5.8	12.3	9.7	10.7	14.2	12.4	13.1
31	---	---	---	6.2	4.9	5.4	---	---	---	14.2	12.5	13.0
MONTH	5.4	2.0	3.2	7.4	2.2	4.4	12.5	5.0	7.8	14.2	9.9	12.0

ARKANSAS RIVER BASIN

07099400 ARKANSAS RIVER ABOVE PUEBLO, CO--Continued

TEMPERATURE, WATER (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN									
1	13.8	12.5	13.0	16.1	15.1	15.5	---	---	---	26.6	18.3	21.9
2	13.8	12.6	13.3	16.0	15.4	15.6	21.4	18.4	20.2	26.0	17.8	21.4
3	13.8	12.7	13.3	16.4	15.3	15.8	21.2	18.2	19.2	24.9	17.9	20.7
4	13.8	13.1	13.4	16.3	15.5	15.9	22.0	17.9	19.2	26.4	17.8	21.2
5	13.8	13.2	13.4	16.3	15.6	15.9	22.4	18.0	19.6	26.9	17.0	21.4
6	14.0	13.3	13.6	16.7	15.5	16.1	22.6	18.1	19.7	26.8	17.8	21.8
7	14.2	13.4	13.6	17.1	16.0	16.5	---	---	---	25.8	17.8	21.8
8	14.4	13.1	13.8	17.3	16.7	17.0	21.8	18.3	19.5	26.4	18.4	22.2
9	14.3	13.5	13.9	17.4	16.0	16.8	22.7	17.6	19.8	23.7	18.6	20.9
10	14.4	13.4	13.9	17.5	16.3	16.8	22.9	18.2	20.1	19.9	17.5	18.7
11	14.5	13.4	14.0	17.5	16.0	16.7	23.1	18.5	20.2	20.2	16.7	18.6
12	14.6	13.6	14.0	17.7	16.1	16.7	22.9	17.5	19.9	24.2	17.0	20.3
13	14.6	13.5	13.9	18.1	16.2	17.0	22.2	18.2	19.8	22.0	16.5	19.0
14	14.9	13.4	13.9	17.8	16.6	17.0	23.4	18.1	20.2	21.2	19.1	19.9
15	15.0	13.4	13.9	17.9	16.6	17.2	23.1	18.3	20.1	22.6	18.8	20.2
16	15.0	13.5	14.0	18.1	17.2	17.6	23.9	19.0	20.9	22.5	18.6	20.0
17	15.0	13.5	14.0	18.3	17.2	17.6	22.7	18.0	20.1	24.3	18.6	20.8
18	15.0	13.5	14.1	18.2	17.4	17.7	22.9	18.9	20.6	19.3	15.5	17.6
19	14.7	13.6	14.3	18.3	17.6	17.9	24.0	18.8	21.0	22.5	14.0	17.7
20	15.1	13.7	14.3	18.6	17.7	18.1	23.9	20.0	21.3	23.2	14.3	18.3
21	15.5	13.8	14.5	18.9	17.5	18.2	23.7	19.9	21.4	22.6	14.7	18.3
22	15.1	14.2	14.5	18.9	17.5	18.2	23.4	19.8	21.2	22.2	13.6	17.6
23	15.1	14.2	14.5	19.1	18.0	18.3	23.6	19.5	21.2	22.3	14.7	18.1
24	14.9	14.2	14.5	19.2	17.9	18.4	24.2	20.1	21.5	23.2	14.4	18.6
25	15.2	14.3	14.7	19.2	18.3	18.6	24.3	20.5	21.8	21.2	14.9	17.7
26	15.3	14.3	14.8	19.8	18.0	18.7	24.5	20.1	21.6	20.9	14.2	17.0
27	15.8	14.4	15.0	19.5	18.0	18.6	24.8	19.9	21.2	19.6	13.9	16.6
28	15.9	14.5	15.3	19.9	18.1	18.7	25.1	18.7	21.4	21.9	14.6	17.6
29	16.2	14.8	15.5	20.5	18.1	19.0	26.5	18.0	21.4	20.9	14.6	17.5
30	15.8	15.1	15.4	21.0	17.7	19.2	26.6	17.6	21.7	22.5	13.5	17.5
31	---	---	---	21.8	17.4	20.0	26.9	18.1	22.0	---	---	---
MONTH	16.2	12.5	14.1	21.8	15.1	17.5	---	---	---	26.9	13.5	19.4

382624104472400 POND 46.212 NEAR TELLER RESERVOIR AT FORT CARSON, CO

LOCATION.--Lat 38°26'24", long 104°47'24", in NE¹/₄SW¹/₄ sec.33, T.18 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, near center of dam on unnamed tributary of Wildhorse Creek (revised), 2.2 mi east of Teller Reservoir dam, and 3.2 mi southeast of Stone City.

DRAINAGE AREA.--0.35 mi² (from Agricultural Research Service).

RESERVOIR ELEVATIONS AND CONTENTS RECORDS

PERIOD OF RECORD.--April 1999 to September 2001, October 2001 to September 2002 (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gages. Elevation of gage is 5,580 ft above sea level, from topographic map.

REMARKS.--Reservoir is formed by an earthfill dam. All figures represent total contents from area-capacity table effective Apr. 28, 1999, and based on a 1997 survey by the Agricultural Research Service. Total capacity, 7.26 acre-ft at elevation 15.28 ft. Elevation of high crest of spillway, about 15.28 ft. Elevation of no contents, about 1.81 ft. Reservoir is used for flood retention and erosion control.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 0.29 acre-ft, Aug. 29, 2000, elevation, 4.80 ft; no contents on most days.

EXTREMES FOR CURRENT WATER YEAR.--Maximum contents, 0.19 acre-ft, July 6, elevation, 4.29 ft; no contents on most days.

Capacity table (elevation, in feet, and contents, in acre-feet, effective April 28, 1999)

1.81	0.000	5.04	0.36	8.81	1.94	12.81	4.79
2.00	0.002	5.75	0.57	9.81	2.53	13.81	5.71
2.94	0.02	7.00	1.05	10.81	3.21	14.81	6.20
3.99	0.13	7.81	1.41	11.81	3.96	15.28	7.26

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	---	---	---	---	---	0.00	0.00	0.00	0.09	0.00	0.00
7	0.00	---	---	---	---	---	0.00	0.00	0.00	0.07	0.00	0.00
8	0.00	---	---	---	---	---	0.00	0.00	0.00	0.05	0.00	0.00
9	0.00	---	---	---	---	---	0.00	0.00	0.00	0.04	0.00	0.00
10	0.00	---	---	---	---	---	0.00	0.00	0.00	e0.03	0.00	0.00
11	0.00	---	---	---	---	---	0.00	0.00	0.00	e0.02	0.00	0.00
12	0.00	---	---	---	---	---	0.00	0.00	0.00	e0.01	0.00	0.00
13	0.00	---	---	---	---	---	0.00	0.00	0.00	e0.01	0.00	0.00
14	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	---	---	---	---	---	0.00	0.00	0.06	0.00	0.00	0.00
26	0.00	---	---	---	---	---	0.00	0.00	e0.03	0.00	0.00	0.00
27	0.00	---	---	---	---	---	0.00	0.00	e0.01	0.00	0.00	0.00
28	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	---	---	---	---	---	0.00	---	0.00	0.00	---
MAX	0.00	---	---	---	---	---	0.00	0.00	0.06	0.09	0.00	0.00
MIN	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00

e Estimated.

ARKANSAS RIVER BASIN

382624104472400 POND 46.212 NEAR TELLER RESERVOIR, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 1999 to September 2000 (seasonal records only), October 2000 to September 2001, October 2001 to September 2002 (seasonal records only). Air temperature data available, April 1999 to current year, in files of the district office.

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 1.94 inches, Apr. 30, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitaion, 0.65 inch, July 5.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
2	0.01	---	---	---	---	---	0.00	0.02	0.00	0.00	0.00	0.00
3	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	---	---	---	---	---	0.00	0.00	0.23	0.00	0.00	0.00
5	0.03	---	---	---	---	---	0.00	0.00	0.00	0.65	0.00	0.00
6	0.00	---	---	---	---	---	0.00	0.00	0.00	0.17	0.00	0.00
7	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	---	---	---	---	---	0.00	0.03	0.00	0.00	0.00	0.00
9	0.00	---	---	---	---	---	0.00	0.00	0.00	0.08	0.00	0.00
10	0.00	---	---	---	---	---	0.00	0.00	0.00	0.01	0.00	0.00
11	0.00	---	---	---	---	---	0.02	0.00	0.00	0.00	0.00	0.00
12	0.00	---	---	---	---	---	0.00	0.04	0.00	0.00	0.00	0.29
13	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	---	---	---	---	---	0.00	0.46	0.02	0.00	0.00	0.00
17	0.00	---	---	---	---	---	0.00	0.04	0.00	0.00	0.00	0.00
18	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.11
19	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	---	---	---	---	---	0.09	0.00	0.00	0.00	0.00	0.00
21	0.00	---	---	---	---	---	0.00	0.00	0.01	0.00	0.00	0.00
22	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.05	0.00
23	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	---	---	---	---	---	0.00	0.16	0.00	0.00	0.00	0.00
25	0.00	---	---	---	---	---	0.00	0.00	0.57	0.00	0.00	0.01
26	0.00	---	---	---	---	---	0.00	0.00	0.00	0.02	0.00	0.00
27	0.00	---	---	---	---	---	0.01	0.00	0.00	0.00	0.01	0.00
28	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	---	---	---	---	0.00	0.00	---	0.00	0.00	---
TOTAL	0.04	---	---	---	---	---	0.12	0.75	0.83	0.93	0.06	0.41
MAX	0.03	---	---	---	---	---	0.09	0.46	0.57	0.65	0.05	0.29

07099969 ARKANSAS RIVER AT ST. CHARLES MESA DIVERSION AT PUEBLO, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°15'13", long 104°36'20", in SW¹/₄NW¹/₄ sec.6, T.21 S., R.64 W., Pueblo County, Hydrologic Unit 11020002, on right bank 10 ft upstream from intake of Saint Charles Mesa Water Association at Moffat Street at Pueblo (revised), 150 ft downstream from Santa Fe Avenue bridge, and 1.1 mi upstream from Fountain Creek.

DRAINAGE AREA.--4,778 mi².

PERIOD OF RECORD.--October 1988 to current year. Prior to October 1989, published as Arkansas River at Moffat Street at Pueblo (07099970).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1988 to current year.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry.

REMARKS.--Records fair except for Aug. 4-5, 20-21, 23, and Sept. 1-30, which are poor. Daily data that are not published are either missing or of unacceptable quality. Specific conductance data is not representative of the stream cross section at the site but is more representative of flow entering the diversion. Specific conductance data representative of the cross section at the site have been published as Arkansas River at Moffat Street at Pueblo (07099970) since the 1991 water year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,760 microsiemens/cm, Sept. 8, 2002; minimum, 225 microsiemens/cm, Aug. 25, 1995.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 2,760 microsiemens/cm, Sept. 8; minimum, 503 microsiemens/cm, July 6.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	899	775	842	669	631	651	804	795	800	795	768	784
2	938	819	851	652	636	646	814	791	800	790	767	779
3	885	830	860	669	646	660	817	781	803	796	774	784
4	904	801	860	676	660	666	789	763	779	811	788	799
5	830	746	780	681	662	669	793	765	782	825	783	808
6	771	740	752	672	647	661	777	767	772	807	779	790
7	775	731	754	656	638	649	786	763	774	785	779	782
8	788	721	750	657	622	634	787	768	777	816	782	798
9	744	604	642	633	627	630	790	768	779	802	757	781
10	649	617	627	641	630	637	797	770	785	761	731	750
11	652	643	647	646	600	628	794	774	785	739	729	734
12	656	621	642	641	621	634	787	760	776	750	735	743
13	640	630	633	682	636	659	784	765	776	756	746	750
14	648	627	638	724	682	710	789	771	781	754	739	746
15	641	620	631	748	705	721	787	739	770	748	738	742
16	630	621	624	788	748	771	770	743	761	748	733	740
17	628	614	622	782	755	770	779	748	762	745	732	736
18	634	611	623	805	709	768	772	744	760	745	732	737
19	641	615	629	779	714	767	766	747	757	745	733	739
20	758	625	710	839	776	807	779	753	766	739	720	729
21	778	716	745	953	812	877	780	752	769	753	726	742
22	745	671	717	886	826	854	787	768	775	747	733	738
23	674	626	652	865	797	832	793	761	780	749	718	737
24	648	620	634	842	809	830	774	755	765	747	718	729
25	652	633	645	846	825	838	773	758	766	737	723	729
26	649	628	641	868	836	853	774	756	765	748	734	741
27	663	634	650	853	809	832	778	756	767	767	740	751
28	683	638	660	833	812	820	784	755	774	756	738	746
29	666	644	657	847	803	817	791	775	787	747	726	739
30	684	655	670	862	794	817	777	766	773	744	726	735
31	699	667	681	---	---	---	791	766	780	809	730	754
MONTH	938	604	693	953	600	737	817	739	776	825	718	755

07099970 ARKANSAS RIVER AT MOFFAT STREET AT PUEBLO, CO

LOCATION.--Lat 38°15'13", long 104°36'20", in SW¹/₄NW¹/₄ sec.6, T.21 S., R.64 W., Pueblo County, Hydrologic Unit 11020002, on right bank 10 ft upstream from Saint Charles Mesa Water District intake at Moffat Street at Pueblo (revised), 150 ft downstream from Santa Fe Avenue bridge, and 1.1 mi upstream from Fountain Creek.

DRAINAGE AREA.--4,778 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1988 to current year.

REVISED RECORDS: WDR CO-90-1: 1989(M).

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Elevation of gage is 4,653 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good except for Sept. 1-30, which are fair. Records do not include diversion for municipal supply of Saint Charles Mesa Water District. Natural flow of stream affected by storage reservoirs, power developments, transbasin and transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants. Flow almost completely regulated by Pueblo Reservoir (station 07099350) 8 mi upstream since Jan. 9, 1974.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	140	66	61	66	76	118	24	134	269	32	4.0
2	27	132	68	63	66	70	191	25	235	261	30	3.8
3	27	114	68	63	65	70	224	59	371	261	22	3.7
4	32	115	78	58	61	73	214	464	513	265	17	3.6
5	63	115	76	49	56	76	217	453	542	257	11	3.7
6	63	159	76	55	56	75	216	446	536	308	8.3	3.5
7	67	231	76	54	55	75	218	474	511	466	7.6	3.5
8	81	359	72	54	54	69	242	497	554	578	7.6	3.5
9	270	395	71	64	56	61	210	550	772	444	7.6	3.7
10	231	336	71	87	62	56	148	544	699	212	6.6	5.5
11	208	228	75	80	68	48	158	518	430	109	6.6	3.8
12	219	167	77	76	71	38	149	498	318	96	6.3	3.6
13	241	122	69	73	75	71	150	456	269	204	6.1	13
14	242	89	68	74	77	175	118	372	111	87	6.2	7.0
15	273	73	76	75	78	105	62	136	85	142	6.0	3.8
16	301	62	74	75	77	111	24	155	89	309	5.6	4.1
17	278	63	76	76	76	123	23	210	72	220	5.2	5.3
18	277	63	80	75	77	114	22	213	66	216	4.8	4.4
19	250	60	77	72	76	286	22	251	102	219	4.4	3.3
20	54	43	71	73	78	439	49	208	134	225	4.2	2.5
21	67	40	71	73	78	68	55	241	211	211	5.8	2.4
22	85	51	74	74	78	64	43	356	284	193	4.9	2.3
23	132	57	73	72	75	57	38	313	252	135	4.3	2.2
24	163	55	73	74	77	63	37	353	256	158	4.2	2.1
25	186	54	74	70	85	71	68	404	277	218	4.2	2.1
26	160	52	75	64	81	83	70	601	286	140	4.2	2.1
27	105	60	75	64	81	125	45	555	280	94	4.3	2.1
28	126	56	65	65	80	147	26	228	295	104	4.3	2.1
29	135	54	58	65	---	115	25	152	334	99	5.1	2.1
30	112	68	61	65	---	60	25	105	296	64	4.6	2.1
31	123	---	61	66	---	82	---	74	---	50	4.0	---
TOTAL	4626	3613	2225	2109	1985	3146	3207	9935	9314	6614	255.0	110.9
MEAN	149.2	120.4	71.77	68.03	70.89	101.5	106.9	320.5	310.5	213.4	8.226	3.697
MAX	301	395	80	87	85	439	242	601	772	578	32	13
MIN	27	40	58	49	54	38	22	24	66	50	4.0	2.1
AC-FT	9180	7170	4410	4180	3940	6240	6360	19710	18470	13120	506	220

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2002, BY WATER YEAR (WY)

MEAN	243.6	212.9	111.8	103.8	136.7	307.5	555.7	1097	2092	1435	892.5	335.0
MAX	431	491	330	355	312	623	1031	1716	4111	4290	1616	699
(WY)	1996	1998	1998	2000	1996	1997	1998	1996	1997	1995	1995	1995
MIN	125	87.9	16.1	16.7	64.2	101	107	320	310	213	8.22	3.70
(WY)	1990	1989	1990	1989	1995	2002	2002	2002	2002	2002	2002	2002

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1989 - 2002

ANNUAL TOTAL	188338	47139.9	
ANNUAL MEAN	516.0	129.2	628.9
HIGHEST ANNUAL MEAN			1107 1995
LOWEST ANNUAL MEAN			129 2002
HIGHEST DAILY MEAN	2700	May 30	772 Jun 9 6030 Jun 23 1997
LOWEST DAILY MEAN	22	Sep 28	a2.1 Sep 24 a2.1 Sep 24 2002
ANNUAL SEVEN-DAY MINIMUM	29	Sep 28	2.1 Sep 24 2002
MAXIMUM PEAK FLOW			781 Jun 9 b10400 Jun 3 1994
MAXIMUM PEAK STAGE			9.56 Jun 9 14.18 Jun 3 1994
ANNUAL RUNOFF (AC-FT)	373600	93500	455600
10 PERCENT EXCEEDS	1440	308	1620
50 PERCENT EXCEEDS	224	75	320
90 PERCENT EXCEEDS	68	4.7	54

a Also occurred Sept. 25-30, 2002.

b From rating curve extended above 5,190 ft³/s on basis of slope-conveyance and area-velocity study.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1988 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1988 to current year.
 WATER TEMPERATURE: October 1988 to current year.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry.

REMARKS.--Daily specific-conductance records are fair except for Aug. 4-5, 20-21, 23 and Sept. 1-30, which are poor. Daily water-temperature records are good. Daily data that are not published are either during periods of estimated daily discharge or are missing for the day. Specific conductance data computed by using discharge-related coefficients, the discharge record at the site, and the daily mean specific conductance from Arkansas River at St. Charles Mesa Diversion at Pueblo (07099969). Prior to October 1989, published specific conductance data were not representative of the cross section at the site. Reported values for water temperature may not be representative of the cross-section at the site. Additional water-quality data were collected as part of a water-quality assessment of drought conditions and are published in the "Drought Synoptic Sampling" section of this report.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 2,740 microsiemens/cm, Sept. 8-9, 2002; minimum daily mean, 252 microsiemens/cm, June 29, 1993.
 WATER TEMPERATURE: Maximum, 27.9°C, July 31, 2002; minimum, 0.0°C, on many days.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 2,740 microsiemens/cm, Sept. 8-9; minimum daily mean, 546 microsiemens/cm, Mar. 20.
 WATER TEMPERATURE: Maximum, 27.9°C, July 31; minimum, 0.0°C, on many days.

WATER-QUALITY DATA COLLECTED AS PART OF PREFERRED STORAGE OPTIONS PLAN, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)
JAN 09...	1145	58	12.6	8.6	742	5.0	83.8	25.0	2.79	40.8	134	14.5	.7
MAR 11...	1400	54	13.2	8.8	732	10.5	77.0	25.1	3.17	42.8	124	14.5	.7
MAY 21...	1110	164	10.1	8.6	662	15.0	72.2	22.6	2.84	35.3	133	12.6	.7
JUL 22...	1315	185	9.8	8.7	651	23.0	72.4	21.6	3.00	34.5	--	11.8	.6

Date	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
JAN 09...	240
MAR 11...	236
MAY 21...	191
JUL 22...	186

07099970 ARKANSAS RIVER AT MOFFAT STREET AT PUEBLO, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	834	621	782	769	768	699	640	919	765	681	937	2070
2	843	618	782	764	731	707	605	901	681	691	924	2290
3	851	635	785	769	728	700	584	888	621	691	976	2400
4	849	641	759	785	735	700	583	607	592	690	1030	2530
5	762	643	763	795	753	708	585	578	601	701	987	2640
6	734	626	752	777	748	707	588	582	594	657	1010	2680
7	736	602	755	769	750	708	584	573	593	627	1060	2710
8	729	576	759	785	752	714	585	571	585	612	1080	2740
9	590	569	761	765	745	730	586	558	555	636	1110	2740
10	581	580	767	731	724	743	603	556	553	730	1110	1830
11	602	584	766	716	721	765	601	562	582	811	1090	1140
12	595	599	757	726	719	810	603	563	609	819	1110	1420
13	585	632	759	733	703	799	600	570	640	758	1120	1550
14	589	688	763	729	706	617	616	594	771	800	1130	1120
15	580	703	751	725	702	654	679	654	820	800	1130	1210
16	571	753	743	723	698	655	852	665	822	692	1140	1430
17	571	752	744	719	707	647	860	667	841	722	1140	1520
18	572	750	741	720	709	644	885	674	852	724	1160	1490
19	581	752	739	722	711	652	877	637	819	718	1250	991
20	696	796	749	712	705	546	804	664	770	714	1470	1070
21	726	866	751	725	700	690	721	674	729	720	1610	1180
22	696	839	757	721	699	712	750	608	651	719	1310	1270
23	624	816	762	720	707	732	789	617	678	774	1600	1370
24	600	814	747	712	708	733	782	616	679	765	1810	1440
25	605	822	748	713	695	703	718	598	674	717	1870	1530
26	607	838	747	726	694	685	687	568	671	762	1880	1590
27	627	816	749	736	694	637	744	568	672	826	1880	1670
28	632	805	758	731	701	614	841	675	669	828	1880	1720
29	628	802	772	723	---	627	906	744	654	820	1900	1770
30	645	799	758	719	---	710	914	760	668	859	1690	1830
31	653	---	765	737	---	700	---	807	---	868	1810	---
MEAN	661	711	758	739	718	692	706	652	680	740	1330	1760
MAX	851	866	785	795	768	810	914	919	852	868	1900	2740
MIN	571	569	739	712	694	546	583	556	553	612	924	991

TEMPERATURE, WATER (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	22.9	16.5	19.3	14.1	10.2	12.3	7.4	4.0	5.6	2.9	1.2	1.9
2	22.3	16.1	19.0	13.6	9.9	12.1	8.0	5.0	6.4	3.2	0.7	1.7
3	21.3	16.0	18.6	13.9	10.0	12.2	7.5	5.3	6.4	2.5	0.0	1.0
4	20.0	15.4	17.5	13.7	10.0	12.1	7.8	4.5	6.3	3.7	1.9	2.6
5	16.3	13.8	14.9	13.9	9.7	12.2	7.6	5.5	6.4	4.9	1.6	3.0
6	18.8	12.9	15.6	13.8	10.0	12.3	7.3	3.8	5.6	3.9	0.9	2.4
7	19.9	14.1	16.9	14.2	10.1	12.2	7.2	4.8	5.9	5.0	1.1	2.8
8	19.3	14.8	17.1	12.4	10.0	11.2	6.2	3.0	4.7	7.6	3.2	5.0
9	18.6	15.5	16.9	13.4	10.2	11.6	6.3	2.6	4.5	6.3	3.6	4.9
10	17.5	13.9	15.6	12.8	9.2	11.0	6.4	3.3	4.8	5.2	3.4	4.3
11	17.5	13.0	15.5	12.7	9.0	10.9	6.0	2.8	4.5	5.1	1.4	3.2
12	15.8	12.6	14.5	12.9	9.1	11.1	4.7	3.1	3.7	4.9	1.5	3.3
13	16.5	12.4	14.6	12.0	9.5	11.0	4.6	1.3	2.9	5.0	2.3	3.4
14	17.2	12.5	14.9	12.9	9.9	11.4	6.2	2.5	4.2	3.7	0.5	2.2
15	15.6	12.0	14.0	12.1	9.2	10.8	5.6	2.8	4.1	2.9	0.4	1.6
16	16.5	11.7	14.0	12.5	9.2	10.8	5.7	3.0	4.3	2.8	0.2	1.4
17	16.7	12.0	14.5	12.4	9.7	10.8	5.8	2.3	4.1	3.2	0.0	1.5
18	15.7	12.7	14.3	11.9	8.8	10.1	6.2	3.4	4.7	2.8	0.0	1.3
19	15.8	11.4	13.7	11.2	8.0	9.4	5.2	2.2	3.8	3.2	0.0	1.4
20	16.1	10.7	13.4	10.9	6.5	8.5	4.5	1.9	3.3	2.6	0.0	1.3
21	14.5	11.4	13.1	10.3	5.6	8.0	5.2	1.7	3.5	4.6	0.4	2.3
22	16.0	11.9	13.9	10.3	7.4	8.7	5.3	2.6	3.6	5.1	1.2	3.1
23	15.7	11.6	13.7	9.5	7.3	8.6	4.2	1.4	2.8	3.4	1.3	2.1
24	14.5	11.0	12.9	9.2	5.6	7.3	3.7	0.9	2.4	2.8	0.0	1.2
25	13.5	9.6	11.9	8.6	5.6	7.0	3.7	0.8	2.3	5.3	0.4	2.7
26	13.7	9.7	11.9	8.2	5.2	6.4	4.4	1.4	2.8	6.0	1.9	3.8
27	14.2	9.3	12.0	6.5	4.3	5.3	4.7	2.1	3.2	4.7	1.2	3.1
28	14.4	10.8	12.8	6.0	2.8	4.3	5.3	1.8	3.4	5.4	2.1	3.6
29	14.1	11.2	12.8	5.9	2.6	4.2	4.1	2.8	3.4	3.8	1.4	2.6
30	14.0	10.7	12.4	7.2	4.4	5.5	3.0	1.2	2.2	2.3	0.3	1.1
31	13.6	10.9	12.4	---	---	---	3.6	1.5	2.3	4.2	0.2	1.6
MONTH	22.9	9.3	14.7	14.2	2.6	9.6	8.0	0.8	4.1	7.6	0.0	2.5

07099990 FOUNTAIN CREEK AT GREEN MOUNTAIN FALLS, CO

LOCATION.--Lat 38°56'20", long 105°00'55", in NW¹/₄NE¹/₄ sec.8, T.13 S., R.68 W., El Paso County, Hydrologic Unit 11020003, on left bank at upstream side of bridge on Green Mountain Falls Road at Green Mountain Falls, 0.2 mi south of U.S. Highway 24, 0.4 mile upstream from North Catamount Creek, and 1.3 miles downstream from Crystola Creek.

DRAINAGE AREA.--16.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 2001 to current year. Site was part of a hydrologic study, water-quality data available, May 1986 to September 1989, published as "Fountain Creek above Green Mountain Falls" (station 385620105005401).

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 7,740 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation, ground-water withdrawals, and return flows from irrigated areas. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data for Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.89	1.0	1.0	0.96	e0.95	e1.1	2.3	0.91	1.0	0.58	0.42	0.45
2	0.91	1.1	1.1	e0.94	e1.0	e1.1	2.1	0.94	0.96	0.43	0.42	0.45
3	0.84	1.1	1.1	e0.92	e0.97	e1.2	1.9	0.92	0.96	0.43	0.43	0.45
4	0.73	1.0	1.1	0.91	e0.95	1.3	1.9	0.91	1.3	0.44	0.49	0.47
5	0.77	1.1	1.1	e0.95	e0.95	1.2	2.0	0.91	0.80	0.45	0.46	0.46
6	0.88	1.1	1.1	0.99	e0.90	1.2	1.9	0.90	0.75	0.49	0.48	0.46
7	0.85	1.0	1.1	1.1	e0.85	1.2	2.0	0.91	0.66	0.48	0.48	0.47
8	0.72	0.97	0.94	1.1	0.79	1.2	1.8	0.90	0.62	0.46	0.46	0.48
9	0.70	1.0	0.85	1.1	e0.75	e1.2	1.8	0.88	0.59	0.45	0.47	0.60
10	0.93	1.1	0.91	1.0	e0.70	1.2	1.6	0.88	0.59	0.46	0.47	0.71
11	0.98	1.1	e0.90	e0.95	0.72	1.2	1.6	0.87	0.57	0.45	0.46	0.60
12	0.85	1.3	e0.90	e0.92	e0.72	1.2	1.6	1.00	0.56	0.44	0.48	0.53
13	0.91	1.2	e0.90	e0.90	e0.78	1.2	2.0	0.95	0.56	0.43	0.48	0.52
14	0.95	1.1	0.87	e0.87	0.84	1.2	1.8	0.96	0.56	0.44	0.48	0.48
15	0.95	0.87	0.88	e0.85	e0.88	1.2	1.5	0.91	0.56	0.44	0.47	0.47
16	0.91	0.90	0.86	e0.85	e0.92	e1.2	1.5	0.92	0.51	0.43	0.47	0.45
17	0.92	0.76	0.86	e0.83	0.99	e1.1	1.4	0.94	0.51	0.43	e0.46	0.42
18	0.93	0.70	0.86	e0.85	0.99	e1.1	1.3	0.92	0.49	0.43	e0.46	0.44
19	0.93	0.83	0.89	e0.90	0.99	e1.1	1.2	0.91	0.48	0.43	0.46	0.44
20	0.95	1.0	0.95	e1.0	0.99	1.1	1.2	0.91	0.46	0.43	0.49	0.44
21	0.94	1.1	0.98	e1.1	0.99	1.1	1.3	0.91	0.46	0.49	0.48	e0.44
22	0.96	1.0	e0.95	e1.2	1.1	1.4	1.1	0.90	0.44	0.44	0.49	e0.44
23	0.96	1.0	e0.93	e1.1	1.2	1.5	1.1	0.93	0.44	0.45	0.48	0.44
24	0.87	1.0	e0.92	e1.1	1.2	1.7	1.1	1.6	0.44	0.43	0.50	0.46
25	0.87	1.1	e0.92	1.1	e1.2	1.5	1.1	1.7	0.44	0.42	0.51	0.49
26	0.96	1.1	0.92	1.0	e1.1	1.4	1.0	1.3	0.46	0.43	0.50	0.54
27	1.0	1.1	0.95	1.1	e1.1	1.4	1.0	1.2	0.43	0.43	0.54	0.60
28	1.0	e1.0	0.92	0.99	e1.2	1.4	0.99	1.2	0.42	0.42	0.56	0.59
29	1.0	1.1	0.95	0.98	---	1.2	1.00	1.1	0.39	0.42	0.53	0.58
30	0.98	1.1	e0.94	e0.96	---	0.94	0.91	1.1	0.38	0.42	0.52	0.57
31	1.0	---	e0.95	e0.95	---	1.4	---	1.0	---	0.41	0.47	---
TOTAL	28.04	30.83	29.50	30.47	26.72	38.44	45.00	31.29	17.79	13.78	14.87	14.94
MEAN	0.905	1.028	0.952	0.983	0.954	1.240	1.500	1.009	0.593	0.445	0.480	0.498
MAX	1.0	1.3	1.1	1.2	1.2	1.7	2.3	1.7	1.3	0.58	0.56	0.71
MIN	0.70	0.70	0.85	0.83	0.70	0.94	0.91	0.87	0.38	0.41	0.42	0.42
AC-FT	56	61	59	60	53	76	89	62	35	27	29	30

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2002, BY WATER YEAR (WY)

	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002
MEAN	0.905	1.028	0.952	0.983	0.954	1.240	2.042	2.043	1.125	1.023	0.900	0.691
MAX	0.90	1.03	0.95	0.98	0.95	1.24	2.58	3.08	1.66	1.60	1.32	0.88
(WY)	2002	2002	2002	2002	2002	2002	2001	2001	2001	2001	2001	2001
MIN	0.90	1.03	0.95	0.98	0.95	1.24	1.50	1.01	0.59	0.44	0.48	0.50
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002

SUMMARY STATISTICS

FOR 2002 WATER YEAR

WATER YEARS 2001 - 2002

ANNUAL TOTAL	321.67	
ANNUAL MEAN	0.881	
HIGHEST ANNUAL MEAN	0.88	2002
LOWEST ANNUAL MEAN	0.88	2002
HIGHEST DAILY MEAN	2.3	Apr 1
LOWEST DAILY MEAN	0.38	Jun 30
ANNUAL SEVEN-DAY MINIMUM	0.42	Jul 27
MAXIMUM PEAK FLOW	4.4	Jul 1
MAXIMUM PEAK STAGE	b4.11	Jul 1
ANNUAL RUNOFF (AC-FT)	638	
10 PERCENT EXCEEDS	1.2	
50 PERCENT EXCEEDS	0.92	
90 PERCENT EXCEEDS	0.44	

e Estimated.

a From slope-conveyance measurement of peak flow.

b Maximum gage height, 4.29 ft, Mar 2, backwater from ice.

07099990 FOUNTAIN CREEK AT GREEN MOUNTAIN FALLS, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 2001 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good except for estimated daily precipitation, which are poor. Daily data that are not published during period of operation are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.22 inches, Aug. 1, 2001.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.12 inches, Sept. 9, but may have been more during periods of missing record.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.02	---	---	---	---	---	0.00	0.00	0.02	0.00	0.00	0.00
2	0.00	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00	0.00
3	0.00	---	---	---	---	---	0.00	0.00	0.06	0.00	0.07	0.00
4	0.00	---	---	---	---	---	0.00	0.00	0.46	0.00	0.65	0.09
5	0.00	---	---	---	---	---	0.00	0.00	0.01	0.27	0.01	0.00
6	0.00	---	---	---	---	---	0.00	0.00	0.00	0.26	0.00	0.00
7	0.00	---	---	---	---	---	0.07	0.00	0.00	0.00	0.01	0.00
8	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.02
9	0.00	---	---	---	---	---	0.00	0.00	0.00	0.02	0.00	1.12
10	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.49
11	0.00	---	---	---	---	---	0.00	0.01	0.03	0.00	0.00	0.00
12	0.01	---	---	---	---	---	0.26	0.40	0.00	0.00	0.00	0.07
13	0.00	---	---	---	---	---	0.01	0.04	0.01	0.00	0.00	0.25
14	0.00	---	---	---	---	---	0.00	0.00	0.01	0.00	0.00	0.00
15	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	---	---	---	---	---	0.00	0.17	0.04	0.00	0.00	0.00
17	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	---	0.00
18	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	---	0.31
19	0.00	---	---	---	---	---	0.00	0.03	0.01	0.00	e0.02	0.02
20	0.00	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00	0.00
21	0.00	---	---	---	---	---	0.03	0.00	0.00	0.68	0.04	---
22	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.09	---
23	0.00	---	---	---	---	---	0.00	0.42	0.00	0.13	0.00	e0.00
24	0.00	---	---	---	---	---	0.00	0.53	0.00	0.00	0.00	e0.00
25	0.00	---	---	---	---	---	0.00	0.00	0.21	0.00	0.00	0.00
26	0.00	---	---	---	---	---	0.00	0.00	0.01	0.00	0.00	0.24
27	0.00	---	---	---	---	---	0.00	0.00	0.00	0.01	0.39	0.20
28	0.00	---	---	---	---	---	0.00	0.00	0.01	0.01	0.00	0.07
29	0.00	---	---	---	---	---	0.00	0.00	0.00	0.05	0.00	0.03
30	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	0.03	---	---	---	---	---	0.37	1.62	0.88	1.43	---	---
MAX	0.02	---	---	---	---	---	0.26	0.53	0.46	0.68	---	---

e Estimated.

ARKANSAS RIVER BASIN

07103700 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1974 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT: August 1995 to September 1997 (seasonal peaks only), April 1998 to current year (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

REMARKS.--Daily suspended-sediment records are fair.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 8,090 mg/L, June 6, 1997; minimum daily mean, 2 mg/L, Apr. 15, 1999, Oct. 17, 2000, Sept. 25, 2001, June 29, 2002.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 41,800 tons, June 6, 1997; minimum daily, 0.02 ton, June 29, 2002.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 340 mg/L, Aug. 24; minimum daily mean, 2 mg/L, June 29.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 18 tons, May 24; minimum daily, 0.02 ton, June 29.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARDS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	
OCT	31...	1200	6.9	9.0	8.2	392	10.0	44.7	8.78	2.50	16.5	<.015	.71	<.02
DEC	12...	1315	5.1	10.9	8.4	508	2.5	51.8	11.7	2.60	21.7	<.015	1.21	<.02
MAR	06...	1215	6.9	10.6	8.5	436	5.0	50.6	10.4	2.40	20.7	<.015	1.29	<.02
APR	17...	1330	6.5	8.6	8.3	462	13.5	45.1	9.34	2.70	21.4	E.010	.70	<.02
JUN	26...	1245	2.8	7.4	8.4	584	17.5	62.4	12.9	2.70	24.2	E.011	.78	<.02
AUG	21...	0915	2.9	7.9	8.4	558	15.5	59.1	12.7	2.70	22.2	<.015	.51	<.02

Date	Time	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	E COLI, MTEC MF (COL/100 ML) (31633)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	ARSENIC TOTAL (UG/L AS AS) (01002)	BORON, DIS-SOLVED (UG/L AS B) (01020)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
OCT	31...	E.04	4.5	70	160	<.6	<.80	50	50	<.10	<.10	<1.0	<1	.8
DEC	12...	<.06	<1.0	--	22	<.6	<.80	60	50	<.10	<.10	<1.0	<1	E.9
MAR	06...	<.06	<1.0	e28	28	<.6	<.80	E60	E50	<.10	<.10	<1.0	E1	<.6
APR	17...	<.06	<2.0	e40	25	<.6	<.80	50	50	<.10	<.10	<1.0	<1	.8
JUN	26...	<.06	--	e570	e470	<.6	<.80	E50	E60	<.10	<.10	E1.3	<1	E1.4
AUG	21...	<.06	--	e930	600	<.6	<.80	80	70	--	<.10	2.3	E1	E.7

Date	Time	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	CYANIDE (MG/L AS CN) (00720)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)
OCT	31...	1.2	<.01	40	380	<.20	1	30	50	<.01	<.01	<1.6	1	.7
DEC	12...	1.1	<.01	20	100	E.24	<.2	20	30	<.01	<.01	<1.6	<1	E.8
MAR	06...	E1.1	<.01	10	180	<.20	.6	20	30	<.01	<.01	<1.6	<1	<.5
APR	17...	1.4	<.01	<10	290	<.20	.9	40	70	<.01	<.01	1.9	1	.9
JUN	26...	2.4	--	20	140	<.20	.5	20	30	<.01	<.01	<1.6	1	E1
AUG	21...	E.8	--	10	90	<.20	.2	E10	10	<.01	<.01	2.6	2	2

e Estimated value.

E Estimated laboratory analysis value.

07103700 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	SELENIUM, TOTAL (UG/L AS SE) (01147)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, PENDED (MG/L) (80155)
OCT 31...	<.50	<.04	<.04	<3.00	9	26	.54
DEC 12...	1.1	<.04	<.04	<3.00	E3	1.0	.01
MAR 06...	E1.3	<.04	<.04	<4.00	<3	4.0	.07
APR 17...	1.2	<.04	<.04	<4	4	8.0	.14
JUN 26...	1.2	<.04	<.04	<6	<9	9.0	.07
AUG 21...	E1.4	<.04	<.04	<6	<9	28	.22

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	NITROGEN, AMMONIA (MG/L AS N) (00608)	NITROGEN, NO2+NO3 (MG/L AS N) (00631)	ORTHO-PHOSPHATE, SOLVED (MG/L AS P) (00671)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)
SEP 10...	1100	23	8.2	8.0	281	13.5	29.5	5.67	2.00	.028	.63	.02	.22
Date	OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L) (00310)	E COLI, WATER (COL/100 ML) (31633)	COLIFORM, FECAL, UM-MF (COLS./100 ML) (31625)	ARSENIC, DIS-SOLVED (UG/L AS AS) (01000)	ARSENIC, TOTAL (UG/L AS AS) (01002)	BORON, DIS-SOLVED (UG/L AS B) (01020)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	CADMIUM, DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM, UNFLTRD TOTAL (UG/L AS CD) (01027)	CHROMIUM, DIS-SOLVED (UG/L AS CR) (01030)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)
SEP 10...	4.0	3900	4900	.8	2	E40	40	<.10	.28	E1.4	3	3.2	6.2
Date	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY, DIS-SOLVED (UG/L AS HG) (71890)	MERCURY, TOTAL RECOVERABLE (UG/L AS HG) (71900)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)
SEP 10...	70	4160	.47	13.3	20	410	E.01	.02	5.5	4	E.7	E2	<.04
Date	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	1,2,5,6-DIBENZ-ANTHRA-CENE (UG/L) (34556)	2,6-DIETHYL ANILINE WAT FLT 0.7 U (UG/L) (82660)	ACE-NAPHTH-ENE TOTAL (UG/L) (34205)	ACE-NAPHTH-YLENE TOTAL (UG/L) (34200)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ANTHRA-CENE TOTAL (UG/L) (34220)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN, WAT FLD 0.7 U GF, REC (UG/L) (82673)
SEP 10...	.04	<6	60	E.5	<.006	<2	<2	<.006	<.004	<.005	E.05	E.006	<.010
Date	BENZENE NITRO-WATER UNFLTRD RECOVER (UG/L) (34447)	BENZO-A-PYRENE TOTAL (UG/L) (34247)	BENZO B FLUOR-AN-THENE TOTAL (UG/L) (34230)	BENZO K FLUOR-AN-THENE TOTAL (UG/L) (34242)	BENZO-[A]-ANTHRA-CENE WAT UNF (UG/L) (34526)	BENZO-[GHI]-PERY-LENE TOTAL (UG/L) (34521)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL, WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN, WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS, DIS-SOLVED (UG/L) (38933)	CHRY-SENE TOTAL (UG/L) (34320)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA, WATER FLTRD 0.7 U GF, REC (UG/L) (82682)
SEP 10...	<2	E.1	E.3	E.1	E.1	E.6	<.002	E.179	<.020	<.005	E.2	<.018	<.003

E Estimated laboratory analysis value.

ARKANSAS RIVER BASIN

07103700 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO--Continued

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	DEETHYL- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN, DIS- SOLVED (UG/L) (39381)	DISUL- FOTON WATER FLTRD 0.7 U (UG/L) (82677)	EPTC WATER FLTRD 0.7 U (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U (UG/L) (82672)	FLUOR- ANTHENE TOTAL (UG/L) (34376)	FLUOR- ENE TOTAL (UG/L) (34381)	FONOFOS WATER DISS REC (UG/L) (04095)	INDENO (1,2,3- CD) PYRENE TOTAL (UG/L) (34403)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U (UG/L) (82666)
SEP 10...	<.006	.023	<.005	<.02	<.002	<.009	<.005	E.3	E.01	<.003	E.1	<.004	<.035
Date	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U (UG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U (UG/L) (82687)	PHENAN- THRENE TOTAL (UG/L) (34461)
SEP 10...	<.027	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.010	<.007	<.022	<.006	E.1
Date	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, FLTRD 0.7 U DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, FLTRD 0.7 U DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	PYRENE TOTAL (UG/L) (34469)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)
SEP 10...	<.011	<.01	<.004	<.010	<.011	<.02	E.3	<.005	<.02	<.034	<.02	<.005	<.002
Date					TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	NAPHTH- ALENE TOTAL (UG/L) (34696)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)					
SEP 10...					<.009	E.03	152	9.4					

E Estimated laboratory analysis value.

07103700 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO--Continued

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT						
02...	1030	7.3	373	11.0	9.0	.18
25...	1345	5.6	409	5.5	4.0	.06
31...	1200	6.9	392	10.0	26	.54
NOV						
07...	1100	6.2	423	8.0	2.0	.03
DEC						
12...	1315	5.1	508	2.5	1.0	.01
JAN						
08...	1430	6.5	530	4.0	52	.91
MAR						
06...	1150	5.3	577	1.0	--	--
06...	1215	6.9	436	5.0	4.0	.07
07...	1358	6.6	444	7.0	--	--
APR						
01...	1400	8.5	396	11.5	4.0	.09
01...	1431	8.3	396	11.5	--	--
17...	1330	6.5	462	13.5	8.0	.14
MAY						
15...	1045	6.9	419	10.5	9.0	.17
JUN						
03...	1130	4.5	519	15.5	4.0	.05
20...	1400	3.0	624	17.5	5.0	.04
26...	1245	2.8	584	17.5	9.0	.07
JUL						
25...	1330	3.2	530	19.5	4.0	.03
AUG						
21...	0915	2.9	558	15.5	28	.22
SEP						
10...	1100	23	281	13.5	152	9.4
30...	1435	3.4	564	13.5	--	--

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	5.8	6	0.09	6.0	---	---	6.0	---	---
2	7.0	8	0.16	5.5	---	---	6.5	---	---
3	5.3	---	e0.12	6.0	---	---	7.1	---	---
4	4.7	---	e0.11	6.2	---	---	6.0	---	---
5	5.3	8	0.12	6.2	---	---	5.4	---	---
6	5.7	---	e0.12	6.2	---	---	5.3	---	---
7	5.5	8	0.12	6.5	---	---	5.7	---	---
8	5.7	---	e0.13	7.2	---	---	4.3	---	---
9	5.7	8	0.13	7.1	---	---	5.1	---	---
10	5.8	8	0.13	6.3	---	---	5.5	---	---
11	5.5	14	0.21	7.3	---	---	4.9	---	---
12	5.9	8	0.13	7.7	---	---	5.0	---	---
13	6.4	---	e0.08	7.7	---	---	4.1	---	---
14	5.4	6	0.08	7.5	---	---	5.8	---	---
15	5.0	8	0.11	7.4	---	---	5.8	---	---
16	5.2	7	0.10	7.5	---	---	5.6	---	---
17	5.7	10	0.16	7.5	---	---	5.7	---	---
18	4.6	---	e0.17	7.3	---	---	5.7	---	---
19	5.0	14	0.18	7.7	---	---	5.2	---	---
20	5.0	8	0.10	6.6	---	---	5.2	---	---
21	6.0	5	0.08	6.6	---	---	6.0	---	---
22	7.0	10	0.18	7.8	---	---	5.7	---	---
23	6.7	---	e0.19	6.4	---	---	4.5	---	---
24	5.9	8	0.12	6.0	---	---	4.1	---	---
25	6.2	5	0.08	6.5	---	---	4.6	---	---
26	7.3	4	0.08	5.6	---	---	5.8	---	---
27	6.1	6	0.10	5.9	---	---	6.2	---	---
28	6.7	---	e0.10	4.8	---	---	6.4	---	---
29	6.7	4	0.08	5.2	---	---	6.4	---	---
30	6.4	6	0.11	6.9	---	---	5.8	---	---
31	7.8	21	0.48	---	---	---	5.1	---	---
TOTAL	183.0	---	4.15	199.1	---	---	170.5	---	---

e Estimated.

ARKANSAS RIVER BASIN

07103700 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	JANUARY			FEBRUARY			MARCH		
1	6.2	---	---	5.1	---	---	5.6	---	---
2	5.1	---	---	7.5	---	---	4.0	---	---
3	5.8	---	---	7.6	---	---	5.6	---	---
4	7.1	---	---	7.2	---	---	7.3	---	---
5	6.4	---	---	7.1	---	---	7.5	---	---
6	6.2	---	---	7.0	---	---	7.2	---	---
7	6.4	---	---	7.0	---	---	6.1	---	---
8	6.5	---	---	7.0	---	---	5.7	---	---
9	6.5	---	---	5.4	---	---	6.4	---	---
10	6.9	---	---	6.0	---	---	8.1	---	---
11	6.4	---	---	7.5	---	---	8.1	---	---
12	6.5	---	---	6.6	---	---	7.8	---	---
13	6.9	---	---	5.9	---	---	8.3	---	---
14	4.1	---	---	6.6	---	---	8.2	---	---
15	4.6	---	---	6.4	---	---	8.7	---	---
16	7.1	---	---	6.4	---	---	8.8	---	---
17	5.8	---	---	6.4	---	---	8.0	---	---
18	4.9	---	---	5.6	---	---	8.5	---	---
19	5.1	---	---	5.5	---	---	8.8	---	---
20	5.8	---	---	5.6	---	---	8.5	---	---
21	6.9	---	---	5.8	---	---	8.5	---	---
22	6.9	---	---	6.0	---	---	8.7	---	---
23	6.5	---	---	6.2	---	---	9.2	---	---
24	5.7	---	---	6.2	---	---	10	---	---
25	7.9	---	---	5.8	---	---	11	---	---
26	7.8	---	---	4.5	---	---	10	---	---
27	8.4	---	---	6.5	---	---	8.1	---	---
28	9.6	---	---	6.6	---	---	7.1	---	---
29	10	---	---	---	---	---	7.5	---	---
30	6.8	---	---	---	---	---	7.3	---	---
31	5.9	---	---	---	---	---	8.2	---	---
TOTAL	202.7	---	---	177.0	---	---	242.8	---	---

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	APRIL			MAY			JUNE		
1	8.5	4	0.08	5.3	---	e0.21	5.8	4	0.06
2	8.5	5	0.10	9.4	23	0.60	5.5	---	e0.24
3	7.5	---	e0.17	9.1	---	e0.50	4.7	4	0.05
4	7.6	12	0.24	8.4	16	0.37	8.3	46	1.2
5	7.3	8	0.16	9.0	21	0.52	7.0	20	0.42
6	7.7	---	e0.11	8.4	12	0.27	5.3	14	0.20
7	7.7	5	0.10	9.4	15	0.39	5.5	---	e0.18
8	7.7	4	0.08	9.2	---	e0.30	5.0	11	0.14
9	7.5	3	0.07	9.4	12	0.30	4.5	19	0.23
10	7.3	4	0.09	9.2	13	0.33	4.3	13	0.15
11	7.7	---	e0.13	8.8	11	0.27	4.7	14	0.18
12	7.5	7	0.15	11	38	1.3	5.0	---	e0.29
13	7.2	6	0.12	8.3	---	e0.65	4.7	10	0.12
14	6.5	5	0.09	8.4	14	0.32	5.0	9	0.12
15	6.7	5	0.09	6.6	9	0.16	4.2	11	0.12
16	6.9	---	e0.13	7.4	19	0.66	3.7	14	0.13
17	6.6	12	0.22	8.1	33	0.73	3.6	---	e0.12
18	6.2	16	0.26	7.3	---	e0.28	3.1	13	0.11
19	6.0	5	0.09	6.9	6	0.12	3.0	11	0.08
20	5.7	4	0.06	6.5	9	0.16	3.0	10	0.08
21	5.7	---	e0.07	6.9	10	0.18	3.2	12	0.11
22	5.6	---	e0.08	6.2	15	0.31	2.8	---	e0.16
23	5.5	---	e0.09	7.3	84	6.2	2.5	30	0.21
24	5.5	7	0.10	15	312	18.0	2.5	31	0.21
25	5.6	7	0.11	9.1	29	0.73	2.8	20	0.15
26	5.5	---	e0.10	7.9	8	0.18	3.0	14	0.12
27	5.4	7	0.10	6.8	6	0.11	2.7	---	e0.10
28	5.3	6	0.09	5.9	---	e0.13	2.5	5	0.03
29	5.2	---	e0.10	5.5	11	0.16	2.5	2	0.02
30	5.3	9	0.12	6.1	9	0.15	2.1	4	0.03
31	---	---	---	6.0	4	0.07	---	---	---
TOTAL	198.9	---	3.50	248.8	---	34.66	122.5	---	5.36

e Estimated.

07103700 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT
	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)
	JULY			AUGUST			SEPTEMBER		
1	2.3	31	0.20	2.7	23	0.17	2.7	---	e1.0
2	2.4	---	e0.38	2.9	26	0.20	2.6	---	e0.98
3	1.9	67	0.34	3.8	121	2.2	2.6	---	e0.92
4	2.2	56	0.33	6.0	71	1.8	2.7	---	e0.91
5	4.9	71	1.0	6.8	53	1.1	2.9	---	e0.90
6	6.0	215	6.5	4.5	---	e0.36	2.5	103	0.70
7	4.1	---	e0.11	4.0	27	0.30	2.3	---	e0.43
8	3.6	7	0.07	3.8	---	e0.29	2.5	34	0.23
9	3.0	4	0.03	3.4	19	0.18	6.7	113	4.9
10	4.2	67	2.0	3.1	12	0.10	16	227	11.0
11	3.4	37	0.35	2.8	---	e0.10	6.8	151	2.8
12	3.1	---	e0.26	2.8	---	e0.18	5.7	94	1.5
13	2.6	23	0.17	3.0	36	0.29	5.4	44	0.63
14	2.8	19	0.14	3.1	48	0.39	5.2	28	0.39
15	2.9	11	0.08	2.9	69	0.53	4.2	---	e0.40
16	4.2	49	0.86	2.7	---	e0.46	3.9	52	0.54
17	3.5	17	0.17	2.6	44	0.31	3.5	---	e0.47
18	2.8	35	0.27	2.8	57	0.43	4.5	68	0.96
19	2.6	---	e0.28	2.7	67	0.50	5.2	36	0.51
20	2.5	25	0.17	3.1	---	e0.43	4.3	---	e0.21
21	2.7	40	0.40	3.5	33	0.36	3.9	---	e0.15
22	5.8	125	2.0	3.3	8	0.08	4.2	12	0.13
23	4.3	41	0.48	3.7	120	2.7	4.0	---	e0.21
24	4.1	7	0.08	4.5	340	4.1	3.8	29	0.30
25	3.3	8	0.07	3.8	218	2.3	3.2	---	e0.25
26	3.1	28	0.24	3.1	---	e1.6	3.8	24	0.26
27	3.0	30	0.25	3.2	177	1.5	3.9	12	0.12
28	3.0	29	0.23	3.8	---	e1.7	4.0	---	e0.10
29	3.0	---	e0.23	3.4	---	e1.5	3.6	---	e0.09
30	2.7	31	0.23	3.1	---	e1.3	3.5	---	e0.08
31	2.7	35	0.25	3.0	---	e1.2	---	---	---
TOTAL	102.7	---	18.17	107.9	---	28.66	130.1	---	32.07

e Estimated

07103703 CAMP CREEK AT GARDEN OF THE GODS, CO

LOCATION.--Lat 38°52'37", long 104°52'20", in SE¹/₄NE¹/₄ sec.34, T.13 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on left bank, 80 ft downstream from county road bridge at east entrance to Garden of the Gods Park at Colorado Springs (revised), and 1.9 mi upstream from mouth.

DRAINAGE AREA.--9.45 mi².

PERIOD OF RECORD.--April 1992 to current year.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Concrete control since September 1993. Elevation of gage is 6,310 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream may be affected by storage reservoir. Several measurements of specific conductance and water temperature, when obtained, are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.0	0.0	e0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	e0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	e0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	e0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0
5	0.0	0.0	e0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0
6	0.0	0.0	e0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0
7	0.0	0.0	e0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	e0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	e0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03
10	0.0	0.0	e0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.02
11	0.0	0.0	e0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	e0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0
13	0.0	0.0	e0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	e0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	e0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	e0.0	e0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0
17	0.0	e0.0	e0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	e0.0	e0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01
19	0.0	e0.0	e0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	e0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	e0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0
22	0.0	e0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	e0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0
24	0.0	e0.0	0.0	0.0	0.0	0.01	0.0	0.06	0.0	0.0	0.0	0.0
25	0.0	e0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	e0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	e0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	e0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	e0.0	0.0	0.0	---	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	e0.0	0.0	0.0	---	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	---	0.0	0.0	---	0.0	---	0.0	---	0.0	0.0	---
TOTAL	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.12	0.01	0.06	0.0	0.06
MEAN	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.004	0.000	0.002	0.000	0.002
MAX	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.06	0.01	0.02	0.00	0.03
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.2	0.02	0.1	0.00	0.1

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2002, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	
MEAN	0.013	0.001	0.000	0.001	0.000	0.073	2.237	9.870	5.564	0.724	0.624	0.110
MAX	0.12	0.003	0.001	0.015	0.000	0.38	15.7	45.5	27.7	6.78	5.66	0.76
(WY)	1995	1999	1993	1995	1998	1996	1999	1999	1997	1995	1999	1994
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000
(WY)	1993	1993	1994	1993	1993	1994	1994	2000	2000	1993	1993	1993

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1992 - 2002

ANNUAL TOTAL	0.77	0.27	
ANNUAL MEAN	0.002	0.001	1.730
HIGHEST ANNUAL MEAN			6.48 1999
LOWEST ANNUAL MEAN			0.001 2002
HIGHEST DAILY MEAN	0.18 Aug 31	0.06 May 24	240 Apr 29 1999
LOWEST DAILY MEAN	0.00 Jan 1	0.00 Oct 1	a0.00 Aug 15 1992
ANNUAL SEVEN-DAY MINIMUM	0.00 Jan 1	0.00 Oct 1	0.00 Aug 15 1992
MAXIMUM PEAK FLOW		0.94 May 16	b430 Apr 29 1999
MAXIMUM PEAK STAGE		2.60 May 16	c5.40 Apr 29 1999
ANNUAL RUNOFF (AC-FT)	1.5	0.5	1250
10 PERCENT EXCEEDS	0.00	0.00	1.3
50 PERCENT EXCEEDS	0.00	0.00	0.00
90 PERCENT EXCEEDS	0.00	0.00	0.00

- e Estimated.
- a No flow on many days during many years.
- b From rating curve extended above 327 ft³/s.
- c From floodmarks.

07103707 FOUNTAIN CREEK AT 8th STREET AT COLORADO SPRINGS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°49'46", long 104°50'21", in NW¹/₄SE¹/₄ sec.13, T.14 S., R.67 W., El Paso County, Hydrologic Unit 11020003, 270 ft downstream from 8th Street at Colorado Springs (revised), and 0.4 mi upstream from Monument Creek.

DRAINAGE AREA.--119 mi².

PERIOD OF RECORD.--February 1981 to January 1982. March 1998 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)
OCT 31...	1330	8.8	12.6	8.3	589	8.5	59.2	16.7	2.70	89.0	E.008	.83	<.02
DEC 13...	1330	e2.4	11.2	8.1	927	1.5	80.1	32.3	2.50	240	.030	1.54	<.02
MAR 06...	1400	4.5	9.5	8.4	652	7.5	68.0	19.5	2.40	130	<.015	1.36	<.02
APR 17...	1515	.91	7.9	8.2	1410	20.5	94.8	43.2	3.20	490	.030	1.16	<.02
JUN 26...	1415	.11	6.5	7.8	2320	22.0	193	97.4	3.40	870	.117	1.68	<.02

Date	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	E COLI, MTEC MF WATER (COLS./100 ML) (31633)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	ARSENIC DIS-SOLVED (AS AS) (01000)	ARSENIC TOTAL (UG/L AS AS) (01002)	BORON, DIS-SOLVED (AS B) (01020)	BORON, TOTAL RECOV-ERABLE (AS B) (01022)	CADMIUM DIS-SOLVED (AS CD) (01025)	CADMIUM WATER UNPLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, DIS-SOLVED (AS CR) (01030)	CHRO-MIUM, TOTAL RECOV-ERABLE (AS CR) (01034)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
OCT 31...	E.03	4.8	200	e670	2.2	3	80	80	<.10	.11	1.1	<1	1.4
DEC 13...	<.06	<1.0	e34	60	2.3	3	120	110	<.10	E.12	<1.0	<1	E1.4
MAR 06...	<.06	E1.1	e8	e8	--	3	80	80	<.10	E.11	E1.0	2	<1.0
APR 17...	<.06	<2.0	64	50	4.4	6	170	180	.13	.17	<1.0	<1	3.2
JUN 26...	<.06	--	e1200	e1100	4.9	6	290	280	E.22	E.21	E1.5	<1	5.5

Date	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	CYANIDE TOTAL (MG/L AS CN) (00720)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)
OCT 31...	1.9	<.01	30	390	<.20	3	100	140	<.01	<.01	2.1	2	3
DEC 13...	1.8	<.01	10	60	<.20	.38	320	350	<.01	<.01	2.4	3	7
MAR 06...	2.0	<.01	<10	380	<.20	3	100	130	<.01	<.01	--	2	--
APR 17...	4.7	<.01	30	230	.27	2	760	940	<.01	<.01	5.7	6	13
JUN 26...	7.7	--	<10	240	E.21	1	2260	2260	<.01	<.01	8.9	9	14

Date	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 31...	2	<.04	.07	20	40	12	.30
DEC 13...	8	<.04	<.04	80	90	3.0	e.02
MAR 06...	5	<.04	<.04	20	30	15	.19
APR 17...	13	<.04	<.04	90	140	5.8	.01
JUN 26...	13	<.04	<.04	190	220	12	.0

e Estimated value.
E Estimated laboratory analysis value.

07103740 NORTH MONUMENT CREEK AT SPRING STREET AT PALMER LAKE, CO

LOCATION.--Lat 39°06'56", long 104°54'43", in SW¹/₄SE¹/₄ sec.5, T.11 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on left bank at downstream side of bridge on Spring Street at Palmer Lake, 0.1 mi upstream from mouth, and 2.3 mi upstream from Monument Lake.

DRAINAGE AREA.--16.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June to September 2002 (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,120 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. Natural flow of stream affected by storage reservoirs and diversions for municipal supply of Monument and Palmer Lake.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 2.7 ft³/s, Sept. 12, 2002, gage height 3.78 ft, from rating curve extended above 0.60 ft³/s; no flow on many days.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge during period June to September, 2.7 ft³/s, Sept. 12, gage height, 3.78 ft, from rating curve extended above 0.60 ft³/s; no flow on many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	0.01	0.00	0.00
2	---	---	---	---	---	---	---	---	---	0.01	0.00	0.00
3	---	---	---	---	---	---	---	---	---	0.01	0.00	0.00
4	---	---	---	---	---	---	---	---	---	0.01	0.01	0.00
5	---	---	---	---	---	---	---	---	---	0.01	0.00	0.00
6	---	---	---	---	---	---	---	---	---	0.02	0.00	0.00
7	---	---	---	---	---	---	---	---	---	0.01	0.00	0.00
8	---	---	---	---	---	---	---	---	---	0.01	0.00	0.00
9	---	---	---	---	---	---	---	---	---	0.00	0.00	0.00
10	---	---	---	---	---	---	---	---	---	0.00	0.00	0.00
11	---	---	---	---	---	---	---	---	---	0.00	0.00	0.00
12	---	---	---	---	---	---	---	---	---	0.00	0.00	0.04
13	---	---	---	---	---	---	---	---	---	0.00	0.00	0.00
14	---	---	---	---	---	---	---	---	---	0.00	0.00	0.00
15	---	---	---	---	---	---	---	---	---	0.00	0.00	0.00
16	---	---	---	---	---	---	---	---	---	0.00	0.00	0.00
17	---	---	---	---	---	---	---	---	---	0.00	0.00	0.00
18	---	---	---	---	---	---	---	---	---	0.00	0.00	0.00
19	---	---	---	---	---	---	---	---	---	0.00	0.00	0.00
20	---	---	---	---	---	---	---	---	---	0.00	0.00	0.00
21	---	---	---	---	---	---	---	---	---	0.00	0.00	0.00
22	---	---	---	---	---	---	---	---	---	0.00	0.00	0.00
23	---	---	---	---	---	---	---	---	---	0.00	0.00	0.00
24	---	---	---	---	---	---	---	---	---	0.00	0.00	0.00
25	---	---	---	---	---	---	---	---	0.03	0.00	0.00	0.00
26	---	---	---	---	---	---	---	---	0.02	0.00	0.00	0.00
27	---	---	---	---	---	---	---	---	0.05	0.00	0.00	0.00
28	---	---	---	---	---	---	---	---	0.02	0.00	0.00	0.00
29	---	---	---	---	---	---	---	---	0.02	0.00	0.00	0.00
30	---	---	---	---	---	---	---	---	0.02	0.00	0.00	0.00
31	---	---	---	---	---	---	---	---	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	---	---	---	0.09	0.01	0.04
MEAN	---	---	---	---	---	---	---	---	---	0.003	0.000	0.001
MAX	---	---	---	---	---	---	---	---	---	0.02	0.01	0.04
MIN	---	---	---	---	---	---	---	---	---	0.00	0.00	0.00
AC-FT	---	---	---	---	---	---	---	---	---	0.2	0.02	0.08

07103740 NORTH MONUMENT CREEK AT SPRING STREET AT PALMER LAKE, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--June to September 2002 (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published during period of operation are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 0.75 inch, Sept. 9, 2002.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation during period June to September, 0.75 inch, Sept. 9.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	0.00	0.00	0.00
2	---	---	---	---	---	---	---	---	---	0.23	0.00	0.00
3	---	---	---	---	---	---	---	---	---	0.00	0.02	0.00
4	---	---	---	---	---	---	---	---	---	0.00	0.47	0.06
5	---	---	---	---	---	---	---	---	---	0.06	0.00	0.00
6	---	---	---	---	---	---	---	---	---	0.70	0.14	0.00
7	---	---	---	---	---	---	---	---	---	0.00	0.01	0.00
8	---	---	---	---	---	---	---	---	---	0.00	0.01	0.03
9	---	---	---	---	---	---	---	---	---	0.00	0.00	0.75
10	---	---	---	---	---	---	---	---	---	0.03	0.04	0.34
11	---	---	---	---	---	---	---	---	---	0.00	0.00	0.00
12	---	---	---	---	---	---	---	---	---	0.00	0.00	0.68
13	---	---	---	---	---	---	---	---	---	0.00	0.00	0.04
14	---	---	---	---	---	---	---	---	---	0.00	0.00	0.00
15	---	---	---	---	---	---	---	---	---	0.00	0.00	0.00
16	---	---	---	---	---	---	---	---	---	0.00	0.00	0.00
17	---	---	---	---	---	---	---	---	---	0.00	0.00	0.00
18	---	---	---	---	---	---	---	---	---	0.00	0.00	0.31
19	---	---	---	---	---	---	---	---	---	0.00	0.17	0.00
20	---	---	---	---	---	---	---	---	---	0.00	0.01	0.00
21	---	---	---	---	---	---	---	---	---	0.38	0.23	0.00
22	---	---	---	---	---	---	---	---	---	0.08	0.00	0.00
23	---	---	---	---	---	---	---	---	---	0.01	0.00	0.00
24	---	---	---	---	---	---	---	---	---	0.00	0.03	0.00
25	---	---	---	---	---	---	---	---	---	0.00	0.01	0.00
26	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.07
27	---	---	---	---	---	---	---	---	0.55	0.01	0.08	0.01
28	---	---	---	---	---	---	---	---	0.02	0.00	0.01	0.11
29	---	---	---	---	---	---	---	---	0.00	0.00	0.23	0.00
30	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00
31	---	---	---	---	---	---	---	---	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	---	---	---	1.50	1.46	2.40
MAX	---	---	---	---	---	---	---	---	---	0.70	0.47	0.75

07103780 MONUMENT CREEK ABOVE NORTH GATE BOULEVARD AT U.S. AIR FORCE ACADEMY, CO

LOCATION.--Lat 39°01'52", long 104°50'52", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.1, T.12 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on U.S. Air Force Academy, on right bank 50 ft upstream from Denver and Rio Grande Western Railroad bridge, 0.8 mi upstream from North Gate Boulevard, and 1.5 mi downstream from Beaver Creek.

DRAINAGE AREA.--81.7 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1985 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,640 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	2.7	e3.0	e2.8	e3.0	e3.1	3.7	4.7	4.2	2.0	1.6	2.5
2	1.2	3.1	3.0	e2.7	e3.3	e2.8	3.8	4.6	4.2	1.8	1.6	2.4
3	4.4	2.9	3.2	e3.5	e3.5	e2.7	e3.9	5.2	3.4	10	1.7	2.5
4	9.4	3.1	3.4	e4.0	e3.8	e3.2	4.0	3.6	3.6	2.7	1.8	2.2
5	10	3.1	3.1	e3.8	e3.6	e3.6	4.4	3.6	3.0	2.6	1.7	1.9
6	9.4	2.5	3.1	e3.8	e4.0	e4.0	4.2	3.7	3.1	3.5	1.5	1.9
7	9.4	2.6	3.1	e4.0	e4.3	2.5	4.3	3.4	4.1	2.6	1.4	1.7
8	9.5	3.0	e2.8	5.9	e4.7	e2.6	4.8	3.1	3.9	2.3	1.4	1.7
9	9.3	2.6	e3.0	8.4	e4.2	e2.5	4.4	3.4	2.7	2.1	1.4	2.2
10	9.0	3.0	e2.9	5.0	e4.0	e3.1	4.5	4.1	2.7	2.1	1.4	3.9
11	8.5	2.9	e2.7	e5.2	e4.4	3.1	6.0	3.4	2.6	2.2	1.4	3.0
12	4.1	3.1	2.3	e4.6	e4.0	2.8	6.0	5.3	2.4	2.2	1.5	2.8
13	2.6	2.7	e3.4	e4.2	e3.9	3.1	6.4	5.0	2.7	1.9	1.8	3.0
14	2.7	2.4	e3.8	e3.8	e4.4	3.5	7.1	3.5	2.9	1.8	1.7	2.8
15	2.8	2.8	e3.5	e3.5	e4.3	e3.6	7.0	4.2	2.7	1.9	1.5	2.5
16	2.2	3.0	e3.3	e3.4	e4.2	3.9	7.2	4.3	2.6	1.8	1.4	2.5
17	1.3	2.7	3.5	e3.3	e4.0	e3.8	4.7	8.5	2.6	1.6	1.2	2.3
18	1.5	3.0	e3.4	e3.2	3.9	3.6	7.9	7.8	2.4	1.6	1.4	2.4
19	2.0	3.5	e3.3	e3.1	3.4	4.0	7.5	7.0	2.1	1.8	1.7	2.8
20	1.4	8.0	e3.5	e3.5	3.0	3.9	6.3	4.7	2.2	1.7	2.1	2.8
21	1.4	8.1	e3.4	e3.8	e3.1	e4.1	10	4.7	2.2	1.8	2.5	2.4
22	2.0	8.4	e3.1	e4.2	e3.2	e4.7	6.7	8.6	2.6	2.1	2.5	2.6
23	2.3	8.8	e3.1	e3.8	3.5	4.1	6.0	5.5	2.1	1.8	2.6	2.4
24	2.5	6.3	e3.1	e3.7	3.6	4.0	5.2	9.9	2.1	1.9	2.7	2.4
25	2.7	4.1	e3.0	e4.0	e3.2	4.2	5.7	6.4	2.1	1.6	2.8	3.8
26	3.1	e3.5	e3.1	e4.4	e2.8	4.5	4.8	5.5	2.2	1.6	2.6	3.0
27	2.5	e3.2	e3.0	e4.7	e3.1	4.7	5.7	5.3	2.1	1.7	2.7	2.9
28	2.9	e2.9	e3.2	e5.5	e3.5	4.6	5.7	6.2	2.6	1.7	2.5	2.7
29	3.0	e2.7	e3.0	e4.3	---	5.3	5.3	6.0	2.1	1.7	2.8	2.4
30	2.8	e3.0	e2.8	e3.5	---	4.2	7.0	4.3	2.0	1.7	3.8	2.4
31	2.5	---	e2.9	e3.4	---	3.0	---	6.5	---	1.5	2.7	---
TOTAL	129.8	113.7	97.0	127.0	103.9	112.8	170.2	162.0	82.2	69.3	61.4	76.8
MEAN	4.187	3.790	3.129	4.097	3.711	3.639	5.673	5.226	2.740	2.235	1.981	2.560
MAX	10	8.8	3.8	8.4	4.7	5.3	10	9.9	4.2	10	3.8	3.9
MIN	1.2	2.4	2.3	2.7	2.8	2.5	3.7	3.1	2.0	1.5	1.2	1.7
AC-FT	257	226	192	252	206	224	338	321	163	137	122	152

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2002, BY WATER YEAR (WY)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	5.328	6.270	5.388	5.059	5.372	8.694	26.78	48.98	23.31	9.098	8.473	5.225						
MAX	11.4	13.0	9.91	10.1	10.8	21.1	75.5	210	77.8	30.6	36.7	15.7						
(WY)	2000	1998	2000	2000	2000	1998	1999	1999	1999	1995	1999	1997						
MIN	0.95	1.63	1.54	1.08	1.81	2.38	5.67	5.23	2.74	1.04	0.90	1.16						
(WY)	1990	1990	1990	1990	1990	1991	2002	2002	2002	1989	1989	1989						

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1985 - 2002

ANNUAL TOTAL	3058.9	1306.1		
ANNUAL MEAN	8.381	3.578		
HIGHEST ANNUAL MEAN			12.76	
LOWEST ANNUAL MEAN			3.58	1999
HIGHEST DAILY MEAN	46	May 9	10	Oct 5
LOWEST DAILY MEAN	1.2	Sep 27	1.2	Oct 2
ANNUAL SEVEN-DAY MINIMUM	1.3	Sep 26	1.4	Aug 6
MAXIMUM PEAK FLOW			a55	Jul 3
MAXIMUM PEAK STAGE			c7.36	Jul 3
ANNUAL RUNOFF (AC-FT)	6070	2590	d9.01	Apr 30 1999
10 PERCENT EXCEEDS	19	6.0	26	
50 PERCENT EXCEEDS	5.8	3.1	5.8	
90 PERCENT EXCEEDS	2.5	1.8	2.0	

e Estimated.

a From rating curve extended above 52 ft³/s on basis of slope-area measurement of peak flow.

b From slope-area measurement of peak flow.

c Maximum gage height, 7.77 ft, Dec 26, backwater from ice.

d From floodmarks.

07103780 MONUMENT CREEK ABOVE NORTH GATE BOULEVARD AT U.S. AIR FORCE ACADEMY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1984 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
OCT 23...	1400	1.3	466	9.4	16.0	14.7	>9.8	<67	e200	31.6	9.32	40.2	1.3
DEC 13...	1200	3.3	462	8.1	3.5	11.3	2.4	24	e7	33.4	8.38	39.9	1.1
MAR 06...	0900	5.4	422	8.3	1.0	11.3	3.2	e18	e24	31.3	7.40	33.3	1.1
APR 17...	0930	4.9	384	8.1	9.5	9.6	<2.0	e4	e8	30.5	8.08	33.7	1.62
JUN 26...	0930	2.3	430	8.4	17.5	9.3	--	120	120	31.5	6.30	27.6	1.37
AUG 21...	1100	2.8	467	8.3	20.5	8.0	--	260	300	29.4	9.47	31.5	1.53

Date	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
OCT 23...	1.06	E.011	1.99	1.77	E2	<4	260	270	E.1	.09	<.8	<.8	7.8
DEC 13...	7.31	.137	2.04	1.84	--	E1	250	250	E.1	.08	<.8	<.8	11.9
MAR 06...	2.79	.489	1.89	1.86	E1	<2	180	190	<.1	.07	<.8	<.8	6.8
APR 17...	2.36	.037	1.81	1.50	<2	<2	150	160	<.1	.05	<.8	<.8	5.4
JUN 26...	.53	.019	2.19	1.83	2	E1	210	220	E.1	E.04	<.8	<.8	3.2
AUG 21...	<.05	E.009	2.18	1.73	2	E1	260	270	<.1	E.03	<.8	<.8	2.4

Date	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)
OCT 23...	6.8	260	23	E.7	.31	26.9	13.4	<.01	<.01	2.5	2.88	<2	<2
DEC 13...	10.0	480	38	E.7	.35	69.4	30.2	<.01	<.01	E1.5	1.92	<2	<2
MAR 06...	4.8	660	33	1	.22	103	65.7	<.01	<.01	2.6	2.56	<2	<2
APR 17...	4.6	470	38	E.8	.22	106	74.8	<.01	<.01	E1.7	1.66	<2	<2
JUN 26...	1.8	780	87	E.6	.20	120	67.4	<.01	<.01	4.3	3.61	<2	<2
AUG 21...	1.4	1130	44	E.9	.16	158	52.1	.01	<.01	3.9	2.72	<2	<2

Date	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CYANIDE TOTAL (MG/L AS CN) (00720)	SEDI-MENT, DIS-CHARGE, SUS-PENDEED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDEED (T/DAY) (80155)
OCT 23...	<.3	<1	30	21	<.01	--	--
DEC 13...	<.3	<1	40	29	<.01	22	.20
MAR 06...	<.3	<1	E30	17	<.01	28	.40
APR 17...	<.3	<1	<20	17	<.01	14	.19
JUN 26...	<.3	<1	<20	9	<.01	8.9	.06
AUG 21...	<.3	<1	E20	12	<.01	19	.14

e Estimated value.
E Estimated laboratory analysis value.

ARKANSAS RIVER BASIN

07103780 MONUMENT CREEK ABOVE NORTH GATE BOULEVARD AT U.S. AIR FORCE ACADEMY, CO--Continued

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT					APR				
10...	1205	8.6	325	10.5	04...	1405	3.8	417	15.0
NOV					17...	0935	4.9	384	9.5
15...	1145	3.2	430	10.5	MAY				
DEC					09...	1035	3.7	383	9.5
13...	1205	4.3	462	3.5	JUN				
JAN					24...	0945	2.2	430	19.0
08...	1205	3.5	446	4.0	AUG				
FEB					07...	1620	1.4	436	21.0
15...	1415	7.7	404	5.0					
MAR									
06...	0915	4.0	431	1.0					

07103780 MONUMENT CREEK ABOVE NORTH GATE BOULEVARD AT U.S. AIR FORCE ACADEMY, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 2000 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published during period of operation are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.56 inches, May 8, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 0.63 inch, June 12.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	0.00	0.00	0.01	0.00	0.01	0.00
2	0.00	---	---	---	---	---	0.00	0.00	0.00	0.17	0.00	0.00
3	0.00	---	---	---	---	---	0.00	0.00	0.04	0.00	0.01	0.00
4	0.00	---	---	---	---	---	0.00	0.00	0.24	0.00	0.04	0.00
5	0.00	---	---	---	---	---	0.00	0.00	0.00	0.17	0.00	0.00
6	0.00	---	---	---	---	---	0.00	0.00	0.00	0.48	0.00	0.00
7	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	---	---	---	---	---	0.01	0.00	0.00	0.00	0.01	0.07
9	0.00	---	---	---	---	---	0.00	0.00	0.00	0.01	0.00	0.56
10	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.44
11	0.00	---	---	---	---	---	0.00	0.01	0.09	0.00	0.00	0.00
12	0.00	---	---	---	---	---	0.04	0.42	0.63	0.00	0.00	0.05
13	0.00	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00	0.04
14	0.00	---	---	---	---	---	0.00	0.00	0.14	0.00	0.00	0.00
15	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	---	---	---	---	---	0.00	0.51	0.01	0.00	0.00	0.00
17	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.37
19	0.00	---	---	---	---	---	0.00	0.00	0.06	0.00	0.06	0.00
20	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	---	---	---	---	---	0.00	0.00	0.00	0.55	0.43	0.00
22	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.08	0.00
23	0.00	---	---	---	---	---	0.00	0.45	0.00	0.05	0.01	0.00
24	0.00	---	---	---	---	---	0.00	0.56	0.02	0.00	0.00	0.00
25	0.00	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00	0.00
26	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.03
27	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.26	0.18
28	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.01	0.07
29	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.07	0.00
30	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.01	0.00
31	0.00	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	0.00	---	---	---	---	---	0.05	1.97	1.24	1.43	1.00	1.81
MAX	0.00	---	---	---	---	---	0.04	0.56	0.63	0.55	0.43	0.56

07103785 DEADMANS CREEK ABOVE DEADMANS LAKE AT U.S. AIR FORCE ACADEMY, CO

LOCATION.--Lat 39°01'27", long 104°54'03", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.9, T.12 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on U.S. Air Force Academy (revised), on left bank 100 ft upstream from Deadmans Lake, 1.2 mi northwest of the Air Force Academy Chapel, 3.7 mi west of Interstate-25, and 5.0 mi southwest of Monument.

DRAINAGE AREA.--1.55 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 2000 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,220 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.03	0.07	0.07	e0.06	e0.05	e0.04	0.16	0.09	0.05	0.00	0.00	0.00
2	0.03	0.07	0.07	e0.06	e0.05	e0.04	0.15	0.10	0.04	0.00	0.00	0.00
3	0.03	0.07	0.08	e0.06	e0.05	e0.04	0.13	0.09	0.04	0.00	0.00	0.00
4	0.04	0.07	0.08	e0.06	e0.05	e0.05	0.13	0.09	0.07	0.00	0.00	0.00
5	0.04	0.07	0.08	e0.06	e0.05	e0.06	0.15	0.09	0.07	0.00	0.00	0.00
6	0.04	0.07	0.07	e0.07	e0.05	e0.07	0.16	0.08	0.05	0.00	0.00	0.00
7	0.04	0.07	0.07	e0.07	e0.05	e0.08	0.17	0.08	0.04	0.00	0.00	0.00
8	0.03	0.08	e0.07	e0.07	e0.05	e0.07	0.16	0.08	0.04	0.00	0.00	0.00
9	0.03	0.08	e0.07	e0.06	e0.05	e0.06	0.16	0.09	0.03	0.00	0.00	0.00
10	0.04	0.07	e0.08	e0.06	e0.04	e0.07	0.16	0.08	0.02	0.00	0.00	0.00
11	0.04	0.07	e0.08	e0.06	e0.04	0.08	0.15	0.08	0.02	0.00	0.00	0.00
12	0.04	0.07	e0.07	e0.06	e0.04	0.08	0.17	0.10	0.02	0.00	0.00	0.00
13	0.04	0.07	e0.07	e0.06	e0.04	0.07	0.17	0.11	0.03	0.00	0.00	0.00
14	0.05	0.08	e0.06	e0.06	e0.04	0.07	0.16	0.10	0.03	0.00	0.00	0.00
15	0.05	0.08	e0.06	e0.06	e0.04	0.06	0.16	0.09	0.03	0.00	0.00	0.00
16	0.05	0.08	e0.06	e0.06	e0.05	0.07	0.15	0.10	0.02	0.00	0.00	0.00
17	0.05	0.08	e0.05	e0.06	e0.05	0.07	0.13	0.11	0.02	0.00	0.00	0.00
18	0.04	0.08	e0.04	e0.06	e0.05	0.07	0.13	0.10	0.01	0.00	0.00	0.00
19	0.05	0.08	e0.05	e0.06	e0.05	0.07	0.12	0.09	0.01	0.00	0.00	0.00
20	0.05	0.07	e0.05	e0.05	e0.05	0.07	0.12	0.08	0.01	0.00	0.00	0.00
21	0.05	0.07	e0.05	e0.05	e0.05	0.06	0.12	0.09	0.01	0.00	0.00	0.00
22	0.05	0.07	e0.05	e0.05	e0.05	0.07	0.11	0.08	0.01	0.00	0.00	0.00
23	0.06	0.08	e0.05	e0.05	e0.05	0.08	0.11	0.07	0.01	0.00	0.00	0.00
24	0.07	0.08	e0.05	e0.05	e0.05	0.08	0.11	0.11	0.01	0.00	0.00	0.00
25	0.07	0.06	e0.05	e0.05	e0.04	0.08	0.11	0.11	0.01	0.00	0.00	0.00
26	0.07	0.07	e0.05	e0.05	e0.04	0.09	0.10	0.10	0.01	0.00	0.00	0.00
27	0.07	0.09	e0.05	e0.05	e0.04	0.10	0.10	0.08	0.0	0.00	0.00	0.00
28	0.07	e0.07	e0.05	e0.05	e0.04	0.10	0.10	0.08	0.00	0.00	0.00	0.00
29	0.07	e0.07	e0.05	e0.05	---	0.12	0.09	0.07	0.00	0.00	0.00	0.00
30	0.07	0.08	e0.05	e0.05	---	0.12	0.09	0.07	0.00	0.00	0.00	0.00
31	0.07	---	e0.05	e0.05	---	0.13	---	0.06	---	0.00	0.00	---
TOTAL	1.53	2.22	1.88	1.77	1.30	2.32	4.03	2.75	0.71	0.00	0.00	0.00
MEAN	0.049	0.074	0.061	0.057	0.046	0.075	0.134	0.089	0.024	0.000	0.000	0.000
MAX	0.07	0.09	0.08	0.07	0.05	0.13	0.17	0.11	0.07	0.00	0.00	0.00
MIN	0.03	0.06	0.04	0.05	0.04	0.04	0.09	0.06	0.00	0.00	0.00	0.00
AC-FT	3.0	4.4	3.7	3.5	2.6	4.6	8.0	5.5	1.4	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2002, BY WATER YEAR (WY)

	2000	2001	2002	2000	2001	2002	2000	2001	2002	2000	2001	2002
MEAN	0.076	0.097	0.083	0.088	0.075	0.118	0.511	0.405	0.109	0.033	0.022	0.033
MAX	0.10	0.12	0.11	0.12	0.10	0.16	1.02	0.58	0.16	0.050	0.040	0.072
(WY)	2001	2001	2001	2001	2001	2001	2000	2000	2000	2000	2000	2000
MIN	0.049	0.074	0.061	0.057	0.046	0.075	0.13	0.089	0.024	0.000	0.000	0.000
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 2000 - 2002

ANNUAL TOTAL	53.06	18.51	
ANNUAL MEAN	0.145	0.051	0.104
HIGHEST ANNUAL MEAN			0.16
LOWEST ANNUAL MEAN			0.051
HIGHEST DAILY MEAN	1.1	May 9	1.3
LOWEST DAILY MEAN	0.01	Jul 31	0.00
ANNUAL SEVEN-DAY MINIMUM	0.01	Aug 24	0.00
MAXIMUM PEAK FLOW			b0.30
MAXIMUM PEAK STAGE			3.80
ANNUAL RUNOFF (AC-FT)	105		37
10 PERCENT EXCEEDS	0.36		0.10
50 PERCENT EXCEEDS	0.08		0.05
90 PERCENT EXCEEDS	0.02		0.00

e Estimated.

a No flow many days during 2000, 2002 water years.

b From rating curve extended above 0.90 ft³/s.

07103785 DEADMANS CREEK ABOVE DEADMANS LAKE AT U. S. AIR FORCE ACADEMY, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 2000 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published during period of operation are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.66 inches, May 8, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 0.80 inch, July 2.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	---	---	---	---	---	0.00	0.05	0.00	0.80	0.00	0.00
3	0.00	---	---	---	---	---	0.00	0.00	0.08	0.00	0.00	0.00
4	0.00	---	---	---	---	---	0.00	0.00	0.35	0.00	0.09	0.03
5	0.01	---	---	---	---	---	0.00	0.00	0.00	0.18	0.00	0.00
6	0.00	---	---	---	---	---	0.00	0.00	0.00	0.18	0.00	0.00
7	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	---	---	---	---	---	0.00	0.00	0.00	0.03	0.00	0.79
10	0.00	---	---	---	---	---	0.00	0.00	0.00	0.08	0.00	0.43
11	0.00	---	---	---	---	---	0.00	0.03	0.02	0.00	0.00	0.01
12	0.00	---	---	---	---	---	0.20	0.59	0.31	0.00	0.00	0.04
13	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.06
14	0.00	---	---	---	---	---	0.00	0.00	0.23	0.00	0.00	0.00
15	0.01	---	---	---	---	---	0.00	0.00	0.01	0.00	0.00	0.00
16	0.00	---	---	---	---	---	0.00	0.47	0.00	0.00	0.00	0.00
17	0.00	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00	0.00
18	0.00	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00	0.37
19	0.00	---	---	---	---	---	0.00	0.00	0.04	0.00	0.04	0.00
20	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	---	---	---	---	---	0.05	0.00	0.00	0.24	0.25	0.00
22	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.12	0.00
23	0.00	---	---	---	---	---	0.00	0.47	0.00	0.09	0.00	0.00
24	0.00	---	---	---	---	---	0.00	0.59	0.05	0.00	0.00	0.00
25	0.00	---	---	---	---	---	0.00	0.01	0.02	0.00	0.00	0.00
26	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.06
27	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.17	0.04
28	0.00	---	---	---	---	---	0.00	0.00	0.04	0.00	0.00	0.00
29	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.25	0.00
30	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	0.02	---	---	---	---	---	0.25	2.23	1.15	1.60	0.92	1.83
MAX	0.01	---	---	---	---	---	0.20	0.59	0.35	0.80	0.25	0.79

07103790 MONUMENT CREEK BELOW SEWAGE TREATMENT PLANT AT U.S. AIR FORCE ACADEMY, CO

LOCATION.--Lat 38°58'53", long 104°49'50", in NW¹/₄NW¹/₄ sec.30, T.12 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on U.S. Air Force Academy, on right bank 100 ft upstream from Sante Fe Recreation Trail footbridge, 1.0 mi west of Interstate 25, 1.2 mi southeast of Falcon Stadium, and 1.5 mi northwest of the south entrance to the U.S. Air Force Academy.

DRAINAGE AREA.--122 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 2000 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,420 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data for Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 85 ft³/s, May 5, 2001, gage height, 4.25 ft, from rating curve extended above 44 ft³/s; maximum gage height, 4.68 ft, Sept. 30, 2002, backwater from beaver dam; minimum daily, 1.5 ft³/s, Aug. 17, 2002.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 21 ft³/s, Nov. 21, gage height, 3.80 ft; maximum gage height, 4.68 ft, Sept. 30, backwater from beaver dam; minimum daily, 1.5 ft³/s, Aug. 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	4.5	---	---	---	---	6.2	6.6	6.0	2.9	2.2	2.7
2	2.8	5.2	---	---	---	---	6.5	6.3	5.7	3.2	2.3	2.5
3	3.7	5.2	---	---	---	---	6.5	6.7	5.0	5.7	2.5	2.7
4	12	5.3	---	---	---	---	6.2	6.0	5.4	3.9	2.8	2.6
5	13	5.8	---	---	---	---	6.5	5.6	4.8	3.5	2.7	2.0
6	12	5.2	---	---	---	---	6.4	5.9	4.3	5.7	2.0	2.1
7	12	5.1	---	---	---	---	e6.5	5.5	4.9	6.1	2.1	2.0
8	12	5.3	---	---	---	---	e6.7	5.1	5.2	4.6	2.0	1.9
9	11	5.1	---	---	---	---	e6.4	5.3	3.7	3.9	1.9	2.6
10	11	5.3	---	---	---	---	e6.6	5.8	3.6	3.8	2.0	4.3
11	11	5.6	---	---	---	---	7.1	5.3	3.9	3.6	1.9	4.0
12	5.5	6.4	---	---	---	---	7.8	6.8	3.5	2.8	1.8	3.6
13	4.1	6.3	---	---	---	---	8.8	7.2	4.2	2.5	2.1	3.8
14	4.4	5.0	---	---	---	---	8.8	5.8	4.2	2.4	2.1	3.6
15	4.3	4.9	---	---	---	---	8.9	6.0	4.2	2.4	1.9	3.1
16	4.2	5.5	---	---	---	---	9.2	5.9	3.7	2.4	1.8	2.8
17	3.4	5.4	---	---	---	---	e8.2	9.2	3.7	2.5	1.5	3.0
18	3.3	5.7	---	---	---	---	e9.0	9.3	3.6	2.3	1.6	2.8
19	3.8	5.9	---	---	---	---	e8.8	8.1	3.0	2.6	1.8	3.7
20	3.4	11	---	---	---	---	e8.1	6.3	3.2	2.7	2.3	3.3
21	3.3	12	---	---	---	---	e11	5.4	3.0	2.4	2.8	3.0
22	3.4	11	---	---	---	---	8.6	8.7	3.5	3.3	3.2	3.0
23	4.0	12	---	---	---	---	8.1	6.5	3.0	2.8	2.9	3.1
24	4.2	9.9	---	---	---	---	6.9	11	3.3	2.9	2.9	2.9
25	4.2	5.9	---	---	---	---	7.2	8.6	3.4	2.0	3.2	e4.3
26	4.6	5.8	---	---	---	---	6.6	6.9	3.4	2.0	3.1	e3.8
27	4.4	e5.2	---	---	---	---	6.5	6.6	3.1	2.1	3.3	e3.5
28	4.6	e4.8	---	---	---	---	7.2	6.9	3.4	2.3	3.1	e3.6
29	4.9	e5.2	---	---	---	---	7.3	7.1	3.4	2.3	3.1	e3.1
30	4.9	e5.5	---	---	---	---	7.8	5.9	3.0	2.2	3.9	e3.1
31	4.6	---	---	---	---	---	---	7.2	---	2.1	3.1	---
TOTAL	187.0	191.0	---	---	---	---	226.4	209.5	118.3	95.9	75.9	92.5
MEAN	6.032	6.367	---	---	---	---	7.547	6.758	3.943	3.094	2.448	3.083
MAX	13	12	---	---	---	---	11	11	6.0	6.1	3.9	4.3
MIN	2.8	4.5	---	---	---	---	6.2	5.1	3.0	2.0	1.5	1.9
AC-FT	371	379	---	---	---	---	449	416	235	190	151	183

e Estimated.

07103790 MONUMENT CREEK BELOW SEWAGE TREATMENT PLANT AT U.S. AIR FORCE ACADEMY, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 2000 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published during period of operation are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.62 inches, May 8, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.19 inches, July 5.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	e0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	---	---	---	---	---	0.00	0.00	0.00	0.04	0.00	0.00
3	0.00	---	---	---	---	---	0.00	0.01	0.07	0.00	0.07	0.00
4	0.00	---	---	---	---	---	0.00	0.00	0.19	0.00	0.08	0.01
5	0.00	---	---	---	---	---	0.00	0.00	0.01	1.19	0.00	0.00
6	0.00	---	---	---	---	---	0.00	0.00	0.00	0.48	0.00	0.00
7	0.00	---	---	---	---	---	0.02	0.00	0.00	0.00	0.00	0.00
8	0.00	---	---	---	---	---	0.01	0.01	0.00	0.00	0.00	0.06
9	0.00	---	---	---	---	---	0.00	0.00	0.00	0.12	0.00	0.55
10	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.35
11	0.00	---	---	---	---	---	0.00	0.00	0.02	0.00	0.00	0.01
12	0.00	---	---	---	---	---	0.03	0.35	0.02	0.00	0.00	0.12
13	0.00	---	---	---	---	---	0.01	0.00	0.00	0.00	0.00	0.03
14	0.00	---	---	---	---	---	0.00	0.00	0.28	0.00	0.00	0.01
15	0.00	---	---	---	---	---	0.00	0.00	0.01	0.00	0.00	0.00
16	0.00	---	---	---	---	---	0.00	0.22	0.00	0.00	0.00	0.00
17	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.47
19	0.00	---	---	---	---	---	0.00	0.02	0.30	0.00	0.00	0.00
20	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	---	---	---	---	---	0.00	0.02	0.00	0.13	0.19	0.00
22	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.01	0.00
23	0.00	---	---	---	---	---	0.00	0.50	0.00	0.00	0.00	0.00
24	0.00	---	---	---	---	---	0.00	0.52	0.17	0.00	0.00	0.00
25	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.10
27	0.00	---	---	---	---	---	0.00	0.01	0.00	0.00	0.13	0.04
28	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.11	0.00
30	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.01	0.00
31	0.00	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	0.00	---	---	---	---	---	0.07	1.66	1.07	1.96	0.60	1.75
MAX	0.00	---	---	---	---	---	0.03	0.52	0.30	1.19	0.19	0.55

e Estimated.

07103797 WEST MONUMENT CREEK BELOW RAMPART RESERVOIR, CO

LOCATION.--Lat 38°58'30", long 104°57'18", in NE¹/₄SE¹/₄ sec.26, T.12 S., R.68 W., El Paso County, Hydrologic Unit 11020003, on Pike National Forest (revised), on right bank 0.1 mi below Wildcat Gulch, and 0.5 mi below Rampart Reservoir.

DRAINAGE AREA.--7.29 mi².

PERIOD OF RECORD.--November 1993 to current year.

GAGE.--Water-stage recorder and satellite telemetry. Elevation of gage is 8,710 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by storage reservoir and transmountain diversions. Flow mostly regulated by Rampart Reservoir 0.5 mi upstream. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	3.3	2.9	2.9	3.6	2.9	3.5	3.4	3.4	3.0	3.3	3.3
2	3.4	3.3	2.9	2.9	3.6	2.9	3.4	3.4	3.3	3.0	3.3	3.3
3	3.4	3.3	2.9	2.9	3.6	2.9	3.4	3.4	3.3	3.0	3.3	3.3
4	3.4	3.2	2.9	2.9	3.6	2.9	3.4	3.4	3.5	3.0	3.3	3.3
5	3.3	3.0	2.9	2.9	3.6	2.9	3.5	3.4	3.4	3.1	3.2	3.3
6	3.3	3.0	2.9	3.0	3.6	3.0	3.7	3.4	3.3	3.2	3.3	3.3
7	3.3	3.1	2.9	3.1	3.6	3.0	3.7	3.3	3.3	3.1	3.2	3.2
8	3.3	2.8	2.9	3.1	3.6	3.0	3.7	3.3	3.3	3.1	3.5	3.3
9	3.4	2.7	3.0	2.9	3.4	4.2	3.7	3.3	3.2	3.0	3.5	3.3
10	3.4	2.7	2.9	2.8	3.4	4.8	3.7	3.3	3.2	3.0	3.5	3.4
11	3.4	2.7	2.9	2.8	3.3	3.1	3.7	3.3	3.1	3.0	3.4	3.3
12	3.4	2.7	2.9	2.8	3.2	2.9	3.7	3.4	3.1	3.1	3.5	3.3
13	3.4	2.7	2.9	2.9	3.1	2.9	3.8	3.4	3.1	3.1	3.5	3.4
14	3.4	2.7	2.9	3.0	3.0	2.8	3.8	3.4	3.1	3.1	3.4	3.3
15	3.4	2.7	2.9	2.9	3.0	2.8	3.8	3.4	3.1	3.1	3.4	3.3
16	3.3	2.7	2.9	3.0	3.0	2.8	3.8	3.4	3.1	3.1	3.4	3.3
17	3.3	2.7	2.9	3.2	3.0	2.9	3.7	3.5	3.1	3.1	3.4	3.3
18	3.3	2.7	2.9	3.2	3.1	2.9	3.7	3.4	3.1	3.1	3.4	3.4
19	3.4	2.8	2.9	3.3	3.1	3.0	3.5	3.4	3.0	3.0	3.4	3.5
20	3.4	2.8	2.9	3.3	3.1	3.1	3.4	3.4	3.0	3.0	3.4	3.5
21	3.4	2.8	2.9	3.3	3.1	3.1	3.4	3.4	3.0	3.1	3.3	3.5
22	3.4	2.8	2.9	3.3	3.0	3.2	3.4	3.4	3.0	3.1	3.4	3.5
23	3.4	2.8	2.9	3.3	3.0	3.2	3.5	3.4	3.0	3.1	3.4	3.5
24	3.3	2.8	2.9	3.3	3.0	3.2	3.5	3.6	3.0	3.0	3.4	3.4
25	3.3	2.8	2.9	3.3	2.9	3.2	3.5	3.6	3.0	3.0	3.3	3.4
26	3.4	2.8	2.9	3.3	2.9	3.2	3.5	3.5	3.0	3.1	3.3	3.4
27	3.3	2.8	2.9	3.5	2.9	3.3	3.5	3.4	3.1	3.1	3.3	3.4
28	3.3	2.8	2.9	3.7	2.9	3.5	3.5	3.4	3.0	3.1	3.3	3.4
29	3.3	2.9	2.9	3.6	---	3.5	3.4	3.4	3.0	3.2	3.3	3.4
30	3.3	2.9	2.9	3.6	---	3.4	3.5	3.4	3.0	3.3	3.3	3.4
31	3.3	---	2.9	3.6	---	3.5	---	3.4	---	3.3	3.3	---
TOTAL	104.0	85.8	90.0	97.6	90.2	98.0	107.3	105.5	94.1	95.6	104.2	100.9
MEAN	3.355	2.860	2.903	3.148	3.221	3.161	3.577	3.403	3.137	3.084	3.361	3.363
MAX	3.4	3.3	3.0	3.7	3.6	4.8	3.8	3.6	3.5	3.3	3.5	3.5
MIN	3.3	2.7	2.9	2.8	2.9	2.8	3.4	3.3	3.0	3.0	3.2	3.2
AC-FT	206	170	179	194	179	194	213	209	187	190	207	200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2002, BY WATER YEAR (WY)

	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	4.576	5.156	5.829	5.642	5.782	5.587	5.970	7.193	7.420
MAX	10.1	10.6	9.68	9.36	8.75	10.7	10.5	17.5	15.1
(WY)	1995	1995	1994	1996	1996	1994	1996	1996	1994
MIN	3.35	2.86	2.90	3.15	3.22	3.16	3.58	3.40	3.14
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2002

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1994 - 2002

ANNUAL TOTAL	1821.0	1173.2	
ANNUAL MEAN	4.989	3.214	5.657
HIGHEST ANNUAL MEAN			10.0
LOWEST ANNUAL MEAN			3.21
HIGHEST DAILY MEAN	14 Jul 7	4.8 Mar 10	29 Jul 10 1994
LOWEST DAILY MEAN	2.6 Aug 29	2.7 Nov 9	1.4 Jan 14 1997
ANNUAL SEVEN-DAY MINIMUM	2.7 Nov 9	2.7 Nov 9	2.7 Nov 9 2001
MAXIMUM PEAK FLOW		11 Mar 10	a46 Jun 6 1997
MAXIMUM PEAK STAGE		4.73 Mar 10	5.54 Jun 6 1997
ANNUAL RUNOFF (AC-FT)	3610	2330	4100
10 PERCENT EXCEEDS	9.2	3.5	9.6
50 PERCENT EXCEEDS	4.1	3.3	4.4
90 PERCENT EXCEEDS	2.8	2.9	3.3

a From rating curve extended above 30 ft³/s.

ARKANSAS RIVER BASIN

07103800 WEST MONUMENT CREEK AT U.S. AIR FORCE ACADEMY, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--May 2000 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published during period of operation are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.34 inches, May 5, 2001.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 0.75 inch, Sept. 9.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	---	---	---	---	---	0.00	0.04	0.00	0.02	0.00	0.00
3	0.00	---	---	---	---	---	0.00	0.00	0.09	0.00	0.11	0.00
4	0.00	---	---	---	---	---	0.00	0.00	0.52	0.00	0.12	0.00
5	0.01	---	---	---	---	---	0.00	0.00	0.01	0.21	0.00	0.00
6	0.00	---	---	---	---	---	0.00	0.00	0.00	0.30	0.00	0.00
7	0.00	---	---	---	---	---	0.03	0.00	0.00	0.00	0.02	0.00
8	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.30
9	0.00	---	---	---	---	---	0.00	0.01	0.00	0.04	0.00	0.75
10	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.43
11	0.00	---	---	---	---	---	0.00	0.03	0.13	0.00	0.00	0.01
12	0.00	---	---	---	---	---	0.09	0.52	0.06	0.00	0.00	0.10
13	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.46
14	0.00	---	---	---	---	---	0.00	0.00	0.65	0.00	0.00	0.00
15	0.00	---	---	---	---	---	0.00	0.01	0.01	0.00	0.00	0.00
16	0.00	---	---	---	---	---	0.00	0.21	0.00	0.00	0.00	0.00
17	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.52
19	0.00	---	---	---	---	---	0.00	0.02	0.11	0.00	0.00	0.00
20	0.00	---	---	---	---	---	0.00	0.00	0.00	0.03	0.00	0.00
21	0.00	---	---	---	---	---	0.04	0.00	0.00	0.35	0.33	0.00
22	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.05	0.00
23	0.00	---	---	---	---	---	0.00	0.60	0.00	0.08	0.00	0.00
24	0.00	---	---	---	---	---	0.00	0.63	0.15	0.00	0.00	0.00
25	0.00	---	---	---	---	---	0.00	0.00	0.05	0.00	0.00	0.00
26	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.24
27	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.28	0.06
28	0.00	---	---	---	---	---	0.00	0.00	0.02	0.00	0.00	0.09
29	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	0.01	---	---	---	---	---	0.16	2.07	1.80	1.03	0.91	2.96
MAX	0.01	---	---	---	---	---	0.09	0.63	0.65	0.35	0.33	0.75

07103930 WEST MONUMENT CREEK AT MOUTH AT U.S. AIR FORCE ACADEMY, CO

LOCATION.--Lat 38°57'32", long 104°50'08", in NW¹/₄SE¹/₄ sec.36, T.12 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on left bank 75 ft downstream from Union Pacific railroad bridge at U. S. Air Force Academy, 0.2 mi north of Ice Lake, and 2.0 mi west of Interstate 25.

DRAINAGE AREA.--23.5 mi².

PERIOD OF RECORD.--March 2000 to current year.

GAGE.--Water-stage recorder and satellite telemetry. Elevation of gage is 6,380 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, transmountain diversions, and diversions for municipal use. Flow partly regulated by Rampart Reservoir 9.3 mi upstream, Nichols Reservoir 8.3 mi upstream, and Northfield Reservoir 7.5 mi upstream. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.42	0.84	0.29	0.35	0.75	0.42	0.51	e0.36	0.15	0.00	0.00	0.00
2	0.42	0.87	0.30	0.35	1.3	e0.40	0.91	0.34	0.11	0.00	0.00	0.00
3	0.41	0.88	0.28	0.35	1.1	e0.40	1.2	0.32	0.07	0.00	0.00	0.00
4	0.42	0.87	0.28	0.35	1.2	0.39	1.3	0.31	0.19	0.00	0.00	0.00
5	0.44	0.86	0.29	0.34	1.2	0.36	e1.3	0.30	0.20	0.06	0.00	0.00
6	0.45	0.85	0.30	0.31	1.2	0.33	e1.3	0.26	0.15	0.02	0.00	0.00
7	0.41	0.84	0.30	0.41	1.3	0.30	e1.3	0.24	0.13	0.00	0.00	0.00
8	0.40	0.83	0.28	1.0	1.2	0.26	e1.2	0.27	0.13	0.00	0.00	0.00
9	0.41	0.84	0.32	0.87	1.1	0.25	e1.2	0.27	0.24	0.00	0.00	0.00
10	0.42	0.82	0.33	0.49	1.1	0.27	e0.95	0.50	0.45	0.13	0.00	0.00
11	0.46	0.96	0.32	0.94	1.4	0.27	e0.96	0.61	0.63	0.09	0.00	0.00
12	0.45	0.94	0.33	0.52	1.2	0.27	e0.87	0.71	0.65	0.08	0.00	0.00
13	0.49	0.93	0.30	1.4	1.2	0.25	e0.87	0.45	0.36	0.08	0.00	0.00
14	0.50	0.85	0.36	1.4	1.4	0.34	e0.78	0.41	0.40	0.07	0.00	0.00
15	0.55	0.80	0.33	1.5	1.4	0.34	e0.74	0.38	0.72	0.06	0.00	0.00
16	0.59	0.81	0.32	1.9	1.4	0.33	e0.67	0.36	0.31	0.06	0.00	0.00
17	0.57	0.82	0.32	1.7	1.4	0.32	e0.62	0.37	0.23	0.05	0.00	0.00
18	0.56	0.82	0.29	1.3	1.3	0.32	e0.56	0.35	0.17	0.06	0.00	0.00
19	0.55	0.84	0.28	0.70	1.3	0.33	e0.54	0.31	0.15	0.06	0.00	0.00
20	0.54	0.82	0.29	0.60	1.3	0.32	e0.52	0.28	0.15	0.04	0.00	0.00
21	0.54	0.81	0.32	0.54	1.3	0.32	e0.49	0.27	0.11	0.02	0.00	0.00
22	0.57	0.59	0.33	0.51	1.2	0.31	e0.43	0.26	0.07	0.00	0.00	0.00
23	0.66	0.57	0.32	0.44	0.77	0.32	e0.40	0.27	0.06	0.00	0.00	0.00
24	0.66	0.49	0.30	0.41	0.68	0.32	e0.36	0.60	0.06	0.00	0.00	0.00
25	0.73	0.44	0.30	0.41	e0.60	0.35	e0.33	0.42	0.06	0.00	0.00	0.00
26	0.73	0.40	0.30	0.37	e0.55	0.37	e0.35	0.37	0.04	0.00	0.00	0.00
27	0.72	0.34	0.31	0.35	0.53	0.38	e0.35	0.33	0.03	0.00	0.00	0.00
28	0.70	0.29	0.30	0.33	0.52	0.35	e0.36	0.30	0.02	0.00	0.00	0.00
29	0.71	0.29	0.31	0.31	---	0.34	e0.36	0.28	0.01	0.00	0.00	0.00
30	0.75	0.30	e0.30	0.32	---	0.36	e0.37	0.22	0.00	0.00	0.00	0.00
31	0.76	---	0.34	0.33	---	0.36	---	0.19	---	0.00	0.00	---
TOTAL	16.99	21.61	9.54	21.10	30.90	10.25	22.10	10.91	6.05	0.88	0.00	0.00
MEAN	0.548	0.720	0.308	0.681	1.104	0.331	0.737	0.352	0.202	0.028	0.000	0.000
MAX	0.76	0.96	0.36	1.9	1.4	0.42	1.3	0.71	0.72	0.13	0.00	0.00
MIN	0.40	0.29	0.28	0.31	0.52	0.25	0.33	0.19	0.00	0.00	0.00	0.00
AC-FT	34	43	19	42	61	20	44	22	12	1.7	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2002, BY WATER YEAR (WY)

	2000	2001	2002	2000	2001	2002	2000	2001	2002	2000	2001	2002
MEAN	2.183	4.537	0.621	1.095	1.033	0.636	3.208	2.103	0.797	0.781	0.489	0.416
MAX	3.82	8.35	0.93	1.51	1.10	0.94	7.38	2.99	1.44	1.63	1.14	0.68
(WY)	2001	2001	2001	2001	2002	2001	2000	2000	2000	2001	2001	2000
MIN	0.55	0.72	0.31	0.68	0.96	0.33	0.74	0.35	0.20	0.028	0.000	0.000
(WY)	2002	2002	2002	2002	2001	2002	2002	2002	2002	2002	2002	2002

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 2000 - 2002

ANNUAL TOTAL	413.56	150.33	
ANNUAL MEAN	1.133	0.412	
HIGHEST ANNUAL MEAN			1.252
LOWEST ANNUAL MEAN			2.09
HIGHEST DAILY MEAN	9.5 Jul 18	1.9 Jan 16	0.41 2002
LOWEST DAILY MEAN	0.00 Jul 8	0.00 Jun 30	16 Apr 14 2000
ANNUAL SEVEN-DAY MINIMUM	0.00 Jul 6	0.00 Jul 22	a0.00 Jul 8 2001
MAXIMUM PEAK FLOW		4.1 Feb 16	0.00 Jul 22 2002
MAXIMUM PEAK STAGE		4.16 Feb 16	b20 Feb 20 2001
ANNUAL RUNOFF (AC-FT)	820	298	c4.46 Feb 20 2001
10 PERCENT EXCEEDS	2.2	0.96	907
50 PERCENT EXCEEDS	0.82	0.33	2.4
90 PERCENT EXCEEDS	0.30	0.00	0.68
			0.00

- e Estimated.
- a Also occurred July 9-11, 2001, and on many days during 2002.
- b From rating curve extended above 10 ft³/s.
- c Maximum gage height, 4.66 ft, Apr 14, 2000.

07103940 MONUMENT CREEK AT SOUTH BOUNDARY AT U.S. AIR FORCE ACADEMY, CO

LOCATION.--Lat 38°57'15", long 104°50'00", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.1, T.13 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on the U. S. Air Force Academy, on left bank at the south boundary, 400 feet downstream from the Sante Fe Recreation Trail footbridge, 0.2 mi south of Ice Lake, and 1.5 mi west of Interstate 25.

DRAINAGE AREA.--150 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 2000 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,350 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage treatment plants. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	6.7	e7.0	e6.3	e7.0	e7.6	7.4	7.9	7.1	3.4	2.4	2.9
2	4.9	7.6	7.1	e6.2	e7.2	e7.2	8.2	7.2	6.5	3.6	2.6	2.8
3	5.3	7.8	7.4	e6.4	e7.3	e7.0	8.2	7.4	6.1	6.2	2.7	2.8
4	14	7.8	e7.3	e6.5	e7.5	e7.3	8.1	7.0	6.5	4.7	3.1	2.9
5	16	8.0	7.3	e6.3	e7.2	e7.8	8.1	6.8	6.0	5.6	3.0	2.4
6	15	6.4	e7.1	e6.3	e7.4	e8.2	7.7	6.8	5.7	7.2	2.4	2.4
7	14	6.2	e6.8	e7.0	e7.6	e8.0	7.7	6.6	6.0	8.0	2.3	2.3
8	13	6.5	e6.7	e11	e8.0	e7.5	7.7	6.0	6.5	5.8	2.2	2.2
9	13	6.7	e7.0	e14	e7.2	e7.2	8.2	6.0	5.4	5.1	2.2	3.1
10	13	6.8	e7.2	e10	e7.3	e7.3	8.0	6.5	5.0	4.9	2.3	5.0
11	13	7.2	e7.1	e11	e8.2	7.3	8.8	6.6	5.2	4.7	2.1	4.9
12	8.1	7.6	e7.0	e10	e7.2	7.0	8.9	7.5	5.1	4.0	2.1	4.4
13	5.9	8.0	e6.8	e10	e8.0	7.1	9.9	7.7	5.1	3.7	2.5	4.2
14	5.7	6.7	e7.5	e9.0	e8.8	7.6	10	6.6	5.3	3.5	2.4	3.9
15	5.8	6.4	e7.3	e8.0	e8.5	8.3	9.6	6.7	5.4	3.6	2.3	3.4
16	5.8	6.7	e7.2	e7.5	e8.7	8.4	9.9	6.7	4.8	3.4	2.2	3.4
17	5.0	6.3	e7.4	e7.3	e9.0	e8.2	9.5	9.9	4.6	3.1	1.9	3.3
18	4.9	6.6	e7.2	e7.2	e9.1	e8.2	9.9	10	4.4	3.0	2.1	3.4
19	5.4	6.9	e7.1	e7.0	e9.2	8.3	10	9.1	4.0	3.1	2.2	4.0
20	5.1	13	e7.2	e7.2	e8.7	8.3	9.3	7.9	3.9	3.2	2.8	3.7
21	5.0	e14	e7.1	e7.5	e8.5	8.3	11	6.7	3.6	3.1	3.1	3.6
22	5.2	14	e6.6	e8.0	e9.0	e8.2	9.1	9.2	3.8	3.7	3.4	3.6
23	5.9	15	e6.7	e7.5	e8.5	8.3	8.9	7.9	3.4	3.4	3.3	3.6
24	6.2	13	e6.5	e7.6	e8.4	8.4	7.8	12	3.5	3.5	3.3	3.5
25	6.3	8.7	e6.5	e8.0	e8.0	8.5	8.0	9.3	3.6	3.0	3.4	3.6
26	6.9	e8.0	e6.7	e8.5	e7.5	8.7	8.0	7.7	3.7	3.0	3.3	4.7
27	6.7	e7.2	e6.5	e9.0	e7.8	8.6	7.8	7.6	3.7	2.8	3.5	4.1
28	6.8	e6.7	e6.8	e9.1	e8.0	8.2	8.5	7.6	3.6	2.9	3.5	4.2
29	7.2	e7.0	e6.5	e8.7	---	8.6	8.2	7.8	3.8	2.8	3.5	3.7
30	7.1	e7.2	e6.3	e7.5	---	8.2	8.4	6.9	3.4	2.8	4.1	3.7
31	6.8	---	e6.4	e7.5	---	7.2	---	7.6	---	2.7	3.3	---
TOTAL	247.9	246.7	215.3	253.1	224.8	245.0	260.8	237.2	144.7	123.5	85.5	105.7
MEAN	7.997	8.223	6.945	8.165	8.029	7.903	8.693	7.652	4.823	3.984	2.758	3.523
MAX	16	15	7.5	14	9.2	8.7	11	12	7.1	8.0	4.1	5.0
MIN	4.9	6.2	6.3	6.2	7.0	7.0	7.4	6.0	3.4	2.7	1.9	2.2
AC-FT	492	489	427	502	446	486	517	470	287	245	170	210

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2002, BY WATER YEAR (WY)

	2000	2001	2002	2000	2001	2002	2000	2001	2002	2000	2001	2002
MEAN	8.924	9.892	8.766	9.947	10.02	11.37	27.69	27.83	10.27	8.092	6.773	6.062
MAX	9.85	11.6	10.6	11.7	12.0	14.8	51.7	39.7	13.2	11.4	9.55	8.37
(WY)	2001	2001	2001	2001	2001	2001	2000	2001	2000	2001	2000	2000
MIN	8.00	8.22	6.95	8.22	8.03	7.90	8.69	7.65	4.77	3.96	2.76	3.52
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 2000 - 2002

ANNUAL TOTAL	4954.8	2390.2		
ANNUAL MEAN	13.57	6.548		
HIGHEST ANNUAL MEAN			10.43	
LOWEST ANNUAL MEAN			14.3	2001
HIGHEST DAILY MEAN	60	May 6	6.55	2002
LOWEST DAILY MEAN	4.4	Aug 28	66	Apr 14 2000
ANNUAL SEVEN-DAY MINIMUM	4.8	Sep 26	1.9	Aug 17 2002
MAXIMUM PEAK FLOW			2.2	Aug 11 2002
MAXIMUM PEAK STAGE			49	Jul 5
ANNUAL RUNOFF (AC-FT)	9830	4740	a100	Apr 19 2000
10 PERCENT EXCEEDS	25	9.1	c4.47	Apr 19 2000
50 PERCENT EXCEEDS	10	6.9		
90 PERCENT EXCEEDS	5.9	3.1		

e Estimated.

a From rating curve extended above 58 ft³/s.

b Maximum gage height, 4.47 ft, Jan 3, backwater from ice.

c Also occurred Jan 3, 2002, backwater from ice.

07103940 MONUMENT CREEK AT SOUTH BOUNDARY AT U.S. AIR FORCE ACADEMY, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 2000 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published during period of operation are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.83 inches, May 8, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.56 inches, July 5.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	---	---	---	---	---	0.00	0.01	0.00	0.03	0.00	0.00
3	0.00	---	---	---	---	---	0.00	0.00	0.06	0.00	0.11	0.00
4	0.00	---	---	---	---	---	0.00	0.00	0.23	0.00	0.05	0.00
5	0.00	---	---	---	---	---	0.00	0.00	0.00	1.56	0.00	0.00
6	0.00	---	---	---	---	---	0.00	0.00	0.00	0.53	0.00	0.00
7	0.00	---	---	---	---	---	0.02	0.00	0.00	0.00	0.00	0.00
8	0.00	---	---	---	---	---	0.10	0.05	0.00	0.00	0.00	0.10
9	0.00	---	---	---	---	---	0.00	0.00	0.00	0.08	0.00	0.76
10	0.00	---	---	---	---	---	0.00	0.00	0.00	0.02	0.00	0.36
11	0.00	---	---	---	---	---	0.00	0.00	0.03	0.00	0.00	0.00
12	0.00	---	---	---	---	---	0.04	0.26	0.13	0.00	0.00	0.22
13	0.00	---	---	---	---	---	0.00	0.00	0.01	0.00	0.00	0.07
14	0.00	---	---	---	---	---	0.00	0.00	0.36	0.00	0.00	0.00
15	0.00	---	---	---	---	---	0.00	0.00	0.01	0.00	0.00	0.00
16	0.00	---	---	---	---	---	0.00	0.21	0.00	0.00	0.00	0.00
17	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.27
19	0.00	---	---	---	---	---	0.00	0.01	0.19	0.00	0.02	0.01
20	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	---	---	---	---	---	0.00	0.00	0.01	0.05	0.18	0.00
22	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	---	---	---	---	---	0.00	0.63	0.00	0.00	0.00	0.00
24	0.00	---	---	---	---	---	0.00	0.60	0.13	0.00	0.00	0.00
25	0.00	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00	0.00
26	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.11
27	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.11	0.02
28	0.00	---	---	---	---	---	0.00	0.00	0.01	0.00	0.00	0.00
29	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.13	0.00
30	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.01	0.00
31	0.00	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	0.00	---	---	---	---	---	0.16	1.78	1.17	2.27	0.61	1.92
MAX	0.00	---	---	---	---	---	0.10	0.63	0.36	1.56	0.18	0.76

07103960 KETTLE CREEK ABOVE U.S. AIR FORCE ACADEMY, CO

LOCATION (REVISED).--Lat 38°58'34", long 104°47'55", in NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.29, T.12 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on right bank 70 ft downstream from State Highway 83, 0.5 mi upstream from flood-retention dam, 0.6 mi east of Interstate 25, 2.7 mi upstream from mouth, and 5.4 mi southeast of U.S. Air Force Academy Chapel.

DRAINAGE AREA.--16.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 2000 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,620 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, those above 5.0 ft³/s, and those below 0.30 ft³/s, which are poor. Natural flow of stream affected by erosion-control and livestock-watering reservoirs and ground-water withdrawals. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data for Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 202 ft³/s, July 5, 2002, from rating curve extended above 5.0 ft³/s, gage height, 5.52 ft, from floodmarks; no flow on many days during 2002.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 202 ft³/s, July 5, from rating curve extended above 5.0 ft³/s, gage height, 5.52 ft, from floodmarks; no flow on many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.37	0.50	---	---	---	---	0.52	0.53	0.12	0.03	0.00	0.00
2	0.34	0.58	---	---	---	---	0.40	0.59	0.07	0.03	0.00	0.00
3	0.30	0.65	---	---	---	---	0.40	0.59	0.05	0.02	0.00	0.00
4	0.30	0.66	---	---	---	---	0.43	0.38	0.18	0.02	0.00	0.00
5	0.34	0.78	---	---	---	---	0.45	0.31	0.16	e5.7	0.00	0.00
6	0.33	0.62	---	---	---	---	0.50	0.30	0.16	e0.30	0.00	0.00
7	0.32	0.49	---	---	---	---	0.54	0.26	e0.17	0.23	0.00	0.00
8	0.29	0.48	---	---	---	---	0.50	0.26	0.21	0.22	0.00	0.00
9	0.33	0.45	---	---	---	---	0.49	0.28	0.15	0.30	0.00	0.14
10	0.30	0.40	---	---	---	---	0.57	0.30	0.10	0.17	0.00	0.20
11	0.31	0.45	---	---	---	---	0.53	0.31	e0.05	0.11	0.00	0.17
12	0.31	0.42	---	---	---	---	0.41	0.41	0.12	0.08	0.00	0.21
13	0.33	0.41	---	---	---	---	0.40	0.19	0.14	0.05	0.00	0.10
14	0.41	0.41	---	---	---	---	0.38	0.24	0.20	0.05	0.00	0.04
15	0.61	0.63	---	---	---	---	0.39	0.22	0.17	0.05	0.00	0.03
16	0.40	0.72	---	---	---	---	0.45	0.37	0.12	0.05	0.00	0.01
17	0.37	0.65	---	---	---	---	0.42	0.30	0.12	0.04	0.00	0.00
18	0.38	0.76	---	---	---	---	0.45	0.29	0.09	0.04	0.00	0.17
19	0.37	0.64	---	---	---	---	0.46	0.22	0.06	0.04	0.00	0.01
20	0.37	0.45	---	---	---	---	0.49	0.21	0.07	0.03	0.00	0.01
21	e0.40	0.42	---	---	---	---	0.45	0.22	0.07	0.06	0.00	0.00
22	e0.40	e0.40	---	---	---	---	0.48	0.22	0.05	0.10	0.00	0.00
23	e0.55	e0.40	---	---	---	---	0.51	0.41	0.03	0.08	0.00	0.01
24	0.69	e0.40	---	---	---	---	0.50	0.39	0.35	0.05	0.00	0.01
25	0.78	e0.40	---	---	---	---	0.51	0.37	0.18	0.03	0.00	0.01
26	0.74	e0.40	---	---	---	---	0.65	0.33	0.16	0.02	0.00	0.06
27	0.83	e0.30	---	---	---	---	0.54	0.27	0.11	0.00	0.00	0.05
28	0.80	0.24	---	---	---	---	0.50	0.27	0.08	0.00	0.00	0.05
29	0.77	0.44	---	---	---	---	0.47	0.24	0.06	0.00	0.00	0.05
30	0.73	e0.45	---	---	---	---	0.50	0.25	0.04	0.00	0.00	0.04
31	0.65	---	---	---	---	---	---	0.21	---	0.00	0.00	---
TOTAL	14.42	15.00	---	---	---	---	14.29	9.74	3.64	7.90	0.00	1.37
MEAN	0.47	0.50	---	---	---	---	0.48	0.31	0.12	0.25	0.000	0.046
MAX	0.83	0.78	---	---	---	---	0.65	0.59	0.35	5.7	0.00	0.21
MIN	0.29	0.24	---	---	---	---	0.38	0.19	0.03	0.00	0.00	0.00
AC-FT	29	30	---	---	---	---	28	19	7.2	16	0.00	2.7

e Estimated.

07103960 KETTLE CREEK ABOVE U.S. AIR FORCE ACADEMY, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 2000 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published during period of operation are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.90 inches, July 5, 2002.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.90 inches, July 5.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	---	---	---	---	---	0.00	0.00	0.04	0.00	0.12	0.00
4	0.00	---	---	---	---	---	0.00	0.00	e0.16	0.00	0.02	0.04
5	0.00	---	---	---	---	---	0.00	0.00	e0.00	1.90	0.00	0.00
6	0.00	---	---	---	---	---	0.00	0.00	e0.00	0.51	0.00	0.00
7	0.00	---	---	---	---	---	0.00	0.00	e0.00	0.00	0.00	0.00
8	0.00	---	---	---	---	---	0.01	0.02	e0.00	0.00	0.00	0.14
9	0.00	---	---	---	---	---	0.00	0.00	0.00	0.25	0.00	0.70
10	0.00	---	---	---	---	---	0.00	0.00	e0.00	0.03	0.00	0.38
11	0.00	---	---	---	---	---	0.00	0.01	e0.00	0.00	0.00	0.01
12	0.00	---	---	---	---	---	e0.04	e0.24	e0.06	0.00	0.00	0.14
13	0.00	---	---	---	---	---	0.00	e0.00	0.00	0.00	0.00	0.02
14	0.00	---	---	---	---	---	0.00	e0.00	0.17	0.00	0.00	0.00
15	0.00	---	---	---	---	---	0.00	e0.00	0.00	0.00	0.00	0.00
16	0.00	---	---	---	---	---	0.00	0.25	0.00	0.00	0.00	0.00
17	0.00	---	---	---	---	---	0.00	0.03	0.00	0.00	0.00	0.00
18	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.32
19	0.00	---	---	---	---	---	0.00	0.02	0.01	0.00	0.00	0.00
20	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	---	---	---	---	---	0.00	0.00	0.02	0.18	0.17	0.00
22	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.01	0.00
23	0.00	---	---	---	---	---	0.00	0.51	0.00	0.00	0.00	0.00
24	0.00	---	---	---	---	---	0.00	0.49	0.58	0.00	0.00	0.00
25	0.00	---	---	---	---	---	0.00	0.00	0.01	0.00	0.01	0.00
26	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.09
27	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.04	0.02
28	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.10	0.00
30	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	0.00	---	---	---	---	---	0.05	1.57	1.05	2.87	0.47	1.86
MAX	0.00	---	---	---	---	---	0.04	0.51	0.58	1.90	0.17	0.70

e Estimated.

07103970 MONUMENT CREEK ABOVE WOODMEN ROAD AT COLORADO SPRINGS, CO

LOCATION.--Lat 38°56'02", long 104°49'00", in SW¹/₄NE¹/₄ sec.7, T.13 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on right bank 0.1 mi upstream from Woodmen Road at Colorado Springs (revised), 0.2 mi west of Interstate 25, and 0.5 mi upstream from Cottonwood Creek.

DRAINAGE AREA.--181 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1996 to current year.

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Elevation of gage is 6,270 ft above sea level, from topographic map.

REMARKS.--Records fair except for Oct. 4-11, July 5, and estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	10	e13	e11	e13	e13	11	12	9.9	6.2	4.1	5.0
2	10	11	13	e11	e14	e12	11	12	9.0	6.1	4.8	4.8
3	10	11	12	e12	e15	e12	e11	12	8.3	9.1	6.3	5.0
4	17	11	13	e13	e15	e13	11	11	14	6.8	6.6	5.7
5	18	11	12	e13	e14	e14	12	11	9.0	63	4.8	4.7
6	18	11	12	e13	e15	14	11	10	7.8	44	4.4	4.6
7	18	9.9	e12	e14	e15	13	11	10	8.0	12	4.5	4.5
8	18	10	e11	e16	e16	12	12	10	8.5	9.6	6.5	4.4
9	18	10	e12	e18	e14	e12	13	10	6.7	12	4.5	20
10	18	11	e12	e17	e15	e14	12	11	6.5	46	4.4	22
11	18	11	e12	e17	e17	13	13	12	7.0	11	4.2	7.5
12	13	11	e12	e16	e14	13	13	19	9.0	8.3	4.1	6.4
13	9.8	11	e12	e15	e15	13	14	15	7.6	7.1	4.5	6.7
14	9.7	10	e13	e14	e17	14	14	13	14	6.3	4.7	5.2
15	9.7	11	e13	e13	e15	e13	13	14	8.4	5.6	4.6	4.6
16	9.7	11	e12	e13	e16	e13	14	17	6.8	5.0	4.6	4.4
17	9.4	11	e13	e12	e16	13	13	16	6.6	4.6	4.3	4.5
18	9.4	11	e12	e12	16	13	13	14	6.5	4.4	4.3	13
19	9.4	11	e12	e12	16	13	14	12	6.3	4.4	4.2	8.1
20	9.4	14	e12	e13	16	13	13	11	7.2	4.4	4.8	6.5
21	9.4	15	e12	e14	16	13	15	9.4	7.4	5.1	6.1	6.2
22	9.5	15	e11	e16	16	14	13	12	6.7	7.0	5.9	5.6
23	9.6	18	e11	e14	16	12	13	18	6.8	5.6	6.1	5.9
24	9.5	13	e11	e14	16	15	12	38	15	5.9	5.3	5.9
25	9.5	11	e11	e15	e14	14	12	15	7.1	5.2	5.1	6.3
26	9.7	e11	e12	e16	e13	14	12	10	6.7	5.2	4.8	9.7
27	9.7	e10	e11	e17	e13	12	12	10	6.4	5.2	5.9	6.9
28	9.9	e10	e12	e16	e13	12	12	10	6.5	5.0	5.9	7.0
29	10	e11	e12	e15	---	12	12	10	6.8	4.8	8.4	6.3
30	10	e13	e11	e14	---	12	12	9.2	6.2	4.6	7.1	5.9
31	10	---	e11	e13	---	11	---	9.5	---	4.7	5.9	---
TOTAL	369.3	344.9	370	439	421	401	374	403.1	242.7	334.2	161.7	213.3
MEAN	11.91	11.50	11.94	14.16	15.04	12.94	12.47	13.00	8.090	10.78	5.216	7.110
MAX	18	18	13	18	17	15	15	38	15	63	8.4	22
MIN	9.4	9.9	11	11	13	11	11	9.2	6.2	4.4	4.1	4.4
AC-FT	733	684	734	871	835	795	742	800	481	663	321	423

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2002, BY WATER YEAR (WY)

	1997	1998	1999	2000	2001	2002
MEAN	19.56	19.45	16.74	17.05	17.07	20.85
MAX	30.3	30.1	22.1	23.2	22.1	35.5
(WY)	2000	1998	2001	2000	2000	1998
MIN	11.9	11.5	11.9	13.2	11.5	12.3
(WY)	2002	2002	2002	1998	1997	1997

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1997 - 2002
ANNUAL TOTAL	7448.3	4074.2	
ANNUAL MEAN	20.41	11.16	35.00
HIGHEST ANNUAL MEAN			80.2
LOWEST ANNUAL MEAN			11.2
HIGHEST DAILY MEAN	99	Jul 13	2000
LOWEST DAILY MEAN	9.2	Aug 28	Apr 1 2002
ANNUAL SEVEN-DAY MINIMUM	9.4	Oct 17	4.4
MAXIMUM PEAK FLOW			573
MAXIMUM PEAK STAGE			6.04
ANNUAL RUNOFF (AC-FT)	14770	8080	25360
10 PERCENT EXCEEDS			16
50 PERCENT EXCEEDS			11
90 PERCENT EXCEEDS			5.0

e Estimated.
a Also occurred Aug. 12, 2002.
b From rating curve extended above 636 ft³/s.
c From floodmark.

07103970 MONUMENT CREEK ABOVE WOODMEN ROAD AT COLORADO SPRINGS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1997 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT: May to September 1997 (seasonal peaks only), April 1998 to current year (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

REMARKS.--Daily suspended-sediment records are fair.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 3,580 mg/L, Aug. 19, 1998; minimum daily mean, 2 mg/L, June 9, 2000.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 49,100 tons (estimated), Apr. 30, 1999; minimum daily, 0.08 ton, June 9, 2000, Sept. 30, 2002.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 1,570 mg/L, July 5; minimum daily mean, 5 mg/L, Sept. 30.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 1,220 tons, July 5; minimum daily, 0.08 ton, Sept. 30.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)
OCT	31...	11	10.2	8.4	453	8.0	51.9	--	.90	55.0	.017	1.48	.42
DEC	12...	12	11.6	8.3	461	.5	49.6	9.02	1.00	61.0	.161	3.17	.44
MAR	06...	18	11.1	8.3	413	2.0	42.2	8.10	.90	50.0	.182	2.66	.63
APR	17...	13	8.5	8.1	381	14.0	37.5	6.90	1.30	48.0	E.012	.97	.28
JUN	26...	1045	7.9	7.6	445	20.5	46.2	7.38	.99	52.0	E.012	.82	.30
AUG	21...	1230	4.7	8.3	445	21.0	47.8	8.23	.94	50.0	<.015	.80	.16

Date	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L) (00310)	E COLI, MTEC MF (COL/100 ML) (31633)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	ARSENIC TOTAL (UG/L AS AS) (01002)	BORON, DIS-SOLVED (UG/L AS B) (01020)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	
OCT	31...	.51	<1.0	e17	53	1.3	1	90	90	<.10	<.10	<1.0	<1	--
DEC	12...	.53	<1.0	--	26	1.2	1	100	90	<.10	E.12	<1.0	<1	2.4
MAR	06...	.87	E1.9	e20	40	1.3	2	110	110	<.10	E.13	<1.0	2	2.8
APR	17...	.52	<2.0	35	e15	1.1	2	70	80	<.10	.13	<1.0	<1	1.8
JUN	26...	.37	--	140	250	1.8	2	E50	60	<.10	E.12	E1.1	<1	E1.3
AUG	21...	.21	--	e40	60	1.4	1	80	80	<.10	<.10	E1.5	<1	E.8

Date	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	CYANIDE (MG/L AS CN) (00720)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	
OCT	31...	--	<.01	10	290	<.20	.3	10	40	<.01	<.01	2.8	3	2
DEC	12...	3.5	<.01	10	600	<.20	.9	50	80	<.01	<.01	2.0	2	E2
MAR	06...	5.7	<.01	20	2040	E.28	5	30	160	<.01	.01	3.1	3	2
APR	17...	2.7	<.01	10	550	.22	1	30	60	<.01	<.01	2.7	2	2
JUN	26...	1.9	--	40	360	E.25	.6	40	60	<.01	<.01	3.1	3	2
AUG	21...	E1.0	--	40	330	<.20	.3	40	60	<.01	E.01	3.7	3	E2

e Estimated value.

E Estimated laboratory analysis value.

ARKANSAS RIVER BASIN

07103970 MONUMENT CREEK ABOVE WOODMEN ROAD AT COLORADO SPRINGS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	SELENIUM, TOTAL (UG/L AS SE) (01147)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	SEDIMENT, SUSPENDED (MG/L) (80154)	DISCHARGE, SUSPENDED (T/DAY) (80155)
OCT 31...	1	<.04	<.04	E6	10	6.0	.18
DEC 12...	3	<.04	<.04	E11	E20	24	.76
MAR 06...	3	<.04	.07	10	E30	292	14.2
APR 17...	2	<.04	<.04	E5	E10	37	1.3
JUN 26...	2	<.04	<.04	<6	<9	10	.21
AUG 21...	E2	<.04	<.04	<6	<9	8.0	.10

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER, WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SULFATE SOLVED (MG/L AS SO4) (00945)	NITROGEN, DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	ORTHO-PHOSPHATE, DIS-SOLVED (MG/L AS P) (00671)
SEP 09...	1400	149	--	7.7	179	--	21.8	2.87	.21	24.0	.350	1.05	<.02
10...	1315	19	7.8	8.0	302	16.5	34.8	5.13	.51	30.0	E.008	.50	.12

Date	PHOSPHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L) (00310)	E COLI, MTEC MF (COL/100 ML) (31633)	COLIFORM, FECAL, UM-MF (COLS./100 ML) (31625)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	ARSENIC TOTAL (UG/L AS AS) (01002)	BORON, DIS-SOLVED (UG/L AS B) (01020)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	CADMIUM, DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHROMIUM, DIS-SOLVED (UG/L AS CR) (01030)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
SEP 09...	.45	--	--	--	1.0	10	E30	40	E.22	4.0	E1.3	27	1.9
10...	.21	<2.0	e1100	e1600	1.5	2	E50	60	E.14	E.22	E1.2	<1	1.7

Date	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY, DIS-SOLVED (UG/L AS HG) (71890)	MERCURY, TOTAL RECOVERABLE (UG/L AS HG) (71900)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)	SELENIUM, TOTAL (UG/L AS SE) (01147)
SEP 09...	90	50	34600	.56	200	20	2440	<.01	.15	6.2	60	E2	16
10...	3.6	50	20200	E.29	3.0	20	70	<.01	E.01	--	4	E1	E2

Date	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	1,2,5,6-DIBENZ-ANTHRA-CENE (UG/L) (34556)	2,6-DIETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACE-NAPHTH-ENE TOTAL (UG/L) (34205)	ACE-NAPHTH-YLENE TOTAL (UG/L) (34200)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ANTHRA-CENE TOTAL (UG/L) (34220)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)
SEP 09...	<.04	.34	6	970	E.5	<.006	E.03	E.02	<.006	<.004	<.005	E.10	.012
10...	<.04	<.04	<6	10	<3	<.006	<2	<2	<.006	<.004	<.005	E.07	.009

e Estimated value.
 E Estimated laboratory analysis value.

07103970 MONUMENT CREEK ABOVE WOODMEN ROAD AT COLORADO SPRINGS, CO--Continued

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (82673)	BENZENE NITRO-WATER UNFLTRD RECOVER (UG/L) (34447)	BENZO-A-PYRENE TOTAL (UG/L) (34247)	BENZO B FLUOR-AN-THENE TOTAL (UG/L) (34230)	BENZO K FLUOR-AN-THENE TOTAL (UG/L) (34242)	BENZO-[A]-ANTHRA-CENE WAT UNF (UG/L) (34526)	BENZO-[GHI]-PERY-LENE TOTAL (UG/L) (34521)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CHRY-SENE TOTAL (UG/L) (34320)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)
SEP 09...	<.010	<2	E.09	E.3	E.1	E.08	E.6	<.002	E.128	<.020	<.005	E.2	<.018
SEP 10...	<.010	<2	E.05	E.1	E.1	E.06	E.5	<.002	E.054	<.020	<.005	E.1	<.018
Date	DCPA WATER FLTRD 0.7 U GF, REC (82682)	DEETHYL-ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (82677)	EPTC WATER FLTRD 0.7 U GF, REC (82668)	ETHAL-FLUR-ALIN WAT FLT (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (82672)	FLUOR-ANTHENE TOTAL (UG/L) (34376)	FLUOR-ENE TOTAL (UG/L) (34381)	FONOFOS WATER DISS REC (UG/L) (04095)	INDENO (1,2,3-CD) PYRENE TOTAL (UG/L) (34403)	LINDANE DIS-SOLVED (UG/L) (39341)
SEP 09...	<.003	<.006	--	<.005	<.02	<.002	<.009	<.005	E.6	E.06	<.003	E.1	<.004
SEP 10...	<.003	E.006	.038	<.005	<.02	<.002	<.009	<.005	E.2	E.02	<.003	E.05	<.004
Date	LIN-URON WATER FLTRD 0.7 U GF, REC (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL-AZIN-THION, WAT FLT 0.7 U GF, REC (82686)	METHYL-PARA-THION, WAT FLT 0.7 U GF, REC (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (82687)
SEP 09...	<.035	<.040	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.010	--	<.022	<.006
SEP 10...	<.035	<.027	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.010	<.007	<.022	<.006
Date	PHENAN-THRENE TOTAL (UG/L) (34461)	PHORATE WATER FLTRD 0.7 U GF, REC (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (82681)	
SEP 09...	E.5	<.011	<.01	<.050	<.010	<.011	<.02	E.4	<.005	<.02	<.034	<.02	<.005
SEP 10...	E.1	<.011	E.01	<.025	<.010	<.011	<.02	E.2	<.005	<.02	<.034	<.02	<.005
Date					TRIAL-LATE WATER FLTRD 0.7 U GF, REC (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (82661)	NAPHTH-ALENE TOTAL (UG/L) (34696)	SEDI-MENT, DIS-SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-SUS-PENDED (MG/L) (80155)				
SEP 09...					<.002	<.009	E.1	--	--				
SEP 10...					<.002	<.009	<2	121	6.2				

e Estimated value.
E Estimated laboratory analysis value.

ARKANSAS RIVER BASIN

07103970 MONUMENT CREEK ABOVE WOODMEN ROAD AT COLORADO SPRINGS, CO--Continued

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
OCT						
04...	1100	18	463	12.0	31	1.5
25...	1200	9.6	438	6.5	5.0	.13
31...	1015	11	453	8.0	6.0	.18
NOV						
06...	1130	12	444	9.5	--	--
DEC						
12...	1045	12	461	.5	24	.76
21...	1100	11	466	1.0	--	--
JAN						
08...	1245	15	419	1.0	74	3.0
FEB						
14...	1430	20	369	.5	--	--
MAR						
06...	1030	18	413	2.0	292	14.2
06...	1105	17	409	2.0	--	--
APR						
01...	1530	11	437	17.0	88	2.6
17...	1130	13	381	14.0	37	1.3
17...	1155	13	381	14.0	--	--
26...	1100	12	415	11.5	24	.75
MAY						
17...	0945	14	400	10.5	112	4.2
JUN						
03...	1145	7.9	424	21.0	15	.32
24...	1500	7.0	483	17.5	2720	51.4
24...	1515	36	512	17.5	2600	253
24...	1600	69	318	16.0	3500	652
24...	1645	63	142	17.0	--	--
24...	1700	52	147	17.0	1390	195
25...	1545	6.4	417	20.0	14	.24
26...	1045	7.9	445	20.5	10	.21
JUL						
08...	1145	10	460	24.5	29	.78
16...	1500	4.7	432	27.5	9.0	.11
24...	1100	6.4	458	21.5	18	.31
AUG						
01...	1345	4.1	441	24.0	7.0	.08
13...	1515	4.7	430	23.5	9.0	.11
21...	1230	4.7	445	21.0	8.0	.10
22...	1700	4.7	447	21.0	9.0	.11
SEP						
09...	1030	5.5	456	18.5	7.0	.10
09...	1120	4.9	458	19.0	--	--
09...	1530	35	314	19.0	981	92.7
09...	1545	31	311	18.5	693	58.0
10...	1015	36	219	14.5	326	31.7
10...	1100	29	255	14.5	262	20.5
10...	1315	19	302	16.5	121	6.2
30...	1330	5.8	472	17.0	3.0	.05

07103970 MONUMENT CREEK ABOVE WOODMEN ROAD AT COLORADO SPRINGS, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	10	---	e0.30	10	---	---	e13	---	---
2	10	11	0.30	11	---	---	13	---	---
3	10	10	0.28	11	---	---	12	---	---
4	17	26	1.2	11	---	---	13	---	---
5	18	25	1.2	11	---	---	12	---	---
6	18	---	e1.1	11	---	---	12	---	---
7	18	19	0.89	9.9	---	---	e12	---	---
8	18	15	0.75	10	---	---	e11	---	---
9	18	14	0.68	10	---	---	e12	---	---
10	18	14	0.70	11	---	---	e12	---	---
11	18	---	e0.73	11	---	---	e12	---	---
12	13	---	e0.83	11	---	---	e12	---	---
13	9.8	---	e0.85	11	---	---	e12	---	---
14	9.7	32	0.83	10	---	---	e13	---	---
15	9.7	23	0.60	11	---	---	e13	---	---
16	9.7	---	e0.63	11	---	---	e12	---	---
17	9.4	29	0.72	11	---	---	e13	---	---
18	9.4	13	0.34	11	---	---	e12	---	---
19	9.4	12	0.31	11	---	---	e12	---	---
20	9.4	10	0.25	14	---	---	e12	---	---
21	9.4	---	e0.23	15	---	---	e12	---	---
22	9.5	11	0.27	15	---	---	e11	---	---
23	9.6	10	0.26	18	---	---	e11	---	---
24	9.5	9	0.24	13	---	---	e11	---	---
25	9.5	7	0.17	11	---	---	e11	---	---
26	9.7	---	e0.29	e11	---	---	e12	---	---
27	9.7	---	e0.26	e10	---	---	e11	---	---
28	9.9	9	0.23	e10	---	---	e12	---	---
29	10	8	0.22	e11	---	---	e12	---	---
30	10	9	0.25	e13	---	---	e11	---	---
31	10	6	0.16	---	---	---	e11	---	---
TOTAL	369.3	---	16.07	344.9	---	---	370	---	---

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	e11	---	---	e13	---	---	e13	---	---
2	e11	---	---	e14	---	---	e12	---	---
3	e12	---	---	e15	---	---	e12	---	---
4	e13	---	---	e15	---	---	e13	---	---
5	e13	---	---	e14	---	---	e14	---	---
6	e13	---	---	e15	---	---	14	---	---
7	e14	---	---	e15	---	---	13	---	---
8	e16	---	---	e16	---	---	12	---	---
9	e18	---	---	e14	---	---	e12	---	---
10	e17	---	---	e15	---	---	e14	---	---
11	e17	---	---	e17	---	---	13	---	---
12	e16	---	---	e14	---	---	13	---	---
13	e15	---	---	e15	---	---	13	---	---
14	e14	---	---	e17	---	---	14	---	---
15	e13	---	---	e15	---	---	e13	---	---
16	e13	---	---	e16	---	---	e13	---	---
17	e12	---	---	e16	---	---	13	---	---
18	e12	---	---	16	---	---	13	---	---
19	e12	---	---	16	---	---	13	---	---
20	e13	---	---	16	---	---	13	---	---
21	e14	---	---	16	---	---	13	---	---
22	e16	---	---	16	---	---	14	---	---
23	e14	---	---	16	---	---	12	---	---
24	e14	---	---	16	---	---	15	---	---
25	e15	---	---	e14	---	---	14	---	---
26	e16	---	---	e13	---	---	14	---	---
27	e17	---	---	e13	---	---	12	---	---
28	e16	---	---	e13	---	---	12	---	---
29	e15	---	---	---	---	---	12	---	---
30	e14	---	---	---	---	---	12	---	---
31	e13	---	---	---	---	---	11	---	---
TOTAL	439	---	---	421	---	---	401	---	---

e Estimated.

ARKANSAS RIVER BASIN

07103970 MONUMENT CREEK ABOVE WOODMEN ROAD AT COLORADO SPRINGS, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	11	75	2.2	12	---	e1.3	9.9	41	1.1
2	11	---	e3.1	12	22	0.69	9.0	38	0.94
3	e11	---	e2.5	12	34	1.1	8.3	33	0.76
4	11	---	e1.4	11	---	e1.2	14	193	12.0
5	12	---	e0.93	11	32	0.94	9.0	76	1.9
6	11	25	0.76	10	25	0.70	7.8	41	0.88
7	11	71	2.2	10	22	0.61	8.0	37	0.79
8	12	90	2.9	10	23	0.64	8.5	---	e0.87
9	13	---	e2.0	10	---	e0.71	6.7	36	0.65
10	12	54	1.8	11	26	0.79	6.5	38	0.66
11	13	75	2.6	12	25	0.78	7.0	32	0.59
12	13	66	2.3	19	764	48.0	9.0	102	5.5
13	14	67	2.5	15	270	11.0	7.6	---	e1.5
14	14	---	e2.8	13	---	e2.5	14	610	78.0
15	13	78	2.8	14	41	1.5	8.4	---	e0.69
16	14	63	2.3	17	326	35.0	6.8	14	0.25
17	13	40	1.4	16	521	34.0	6.6	13	0.22
18	13	28	1.0	14	85	3.2	6.5	---	e0.28
19	14	---	e1.2	12	---	e2.1	6.3	21	0.35
20	13	53	1.9	11	45	1.4	7.2	25	0.53
21	15	164	6.7	9.4	35	0.91	7.4	34	1.1
22	13	182	6.4	12	89	3.2	6.7	30	0.54
23	13	101	3.5	18	628	144	6.8	---	e0.36
24	12	---	e1.6	38	1300	190	15	452	46.0
25	12	49	1.6	15	282	12.0	7.1	157	3.4
26	12	28	0.86	10	141	4.0	6.7	19	0.33
27	12	29	0.90	10	87	2.4	6.4	21	0.36
28	12	29	0.94	10	76	2.1	6.5	---	e0.25
29	12	---	e0.87	10	---	e2.0	6.8	11	0.19
30	12	---	e1.5	9.2	63	1.6	6.2	20	0.34
31	---	---	---	9.5	50	1.3	---	---	---
TOTAL	374	---	65.46	403.1	---	511.67	242.7	---	161.33

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	6.2	21	0.35	4.1	8	0.09	5.0	14	0.20
2	6.1	19	0.32	4.8	---	e0.17	4.8	---	e0.19
3	9.1	---	e3.5	6.3	23	0.42	5.0	---	e0.23
4	6.8	31	0.58	6.6	28	0.52	5.7	---	e0.30
5	63	1570	1220	4.8	20	0.26	4.7	---	e0.23
6	44	926	152	4.4	14	0.17	4.6	---	e0.19
7	12	---	e6.4	4.5	---	e0.15	4.5	---	e0.16
8	9.6	47	1.2	6.5	236	12.0	4.4	---	e0.12
9	12	183	21.0	4.5	84	1.0	20	526	84.0
10	46	1260	545	4.4	---	e0.55	22	335	30.0
11	11	520	18.0	4.2	27	0.30	7.5	---	e0.87
12	8.3	140	3.2	4.1	34	0.39	6.4	---	e2.0
13	7.1	---	e1.2	4.5	15	0.18	6.7	---	e1.7
14	6.3	54	0.92	4.7	8	0.10	5.2	---	e0.46
15	5.6	34	0.52	4.6	---	e0.13	4.6	---	e0.31
16	5.0	14	0.20	4.6	12	0.15	4.4	---	e0.24
17	4.6	13	0.17	4.3	13	0.14	4.5	16	0.19
18	4.4	---	e0.20	4.3	38	0.44	13	181	17.0
19	4.4	18	0.22	4.2	---	e0.48	8.1	---	e1.1
20	4.4	23	0.27	4.8	---	e0.43	6.5	31	0.54
21	5.1	29	0.66	6.1	42	0.97	6.2	18	0.31
22	7.0	73	1.5	5.9	18	0.32	5.6	---	e0.18
23	5.6	---	e0.71	6.1	30	0.93	5.9	11	0.17
24	5.9	27	0.44	5.3	38	0.58	5.9	10	0.15
25	5.2	---	e0.22	5.1	---	e0.26	6.3	10	0.17
26	5.2	---	e0.21	4.8	22	0.28	9.7	45	1.6
27	5.2	---	e0.19	5.9	34	0.55	6.9	---	e0.39
28	5.0	---	e0.16	5.9	27	0.43	7.0	16	0.31
29	4.8	---	e0.14	8.4	100	6.0	6.3	7	0.13
30	4.6	---	e0.12	7.1	38	0.73	5.9	5	0.08
31	4.7	---	e0.11	5.9	---	e0.40	---	---	---
TOTAL	334.2	---	1979.71	161.7	---	29.52	213.3	---	143.52

e Estimated.

07103977 COTTONWOOD CREEK AT COWPOKE ROAD AT COLORADO SPRINGS, CO

LOCATION.--Lat 38°57'04", long 104°42'47", in SE¹/₄NW¹/₄ sec.6, T.13 S., R.65 W., El Paso County, Hydrologic Unit 11020003, on left bank on downstream side of bridge on Cowpoke Road at Colorado Springs, 1.0 mi upstream from Woodmen Road, and 5.3 mi east of Interstate 25.

DRAINAGE AREA.--5.93 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1998 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry and artificial control. Elevation of gage is 6,875 ft above sea level, from topographic map.

REMARKS.--Records poor. Natural flow of stream affected by erosion-control and livestock-watering reservoirs and ground-water withdrawals.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 230 ft³/s, June 23, 1999, from rating curve extended above 42 ft³/s on basis of velocity-area study, gage height, 6.25 ft, from floodmarks; minimum daily, 0.01 ft³/s (estimated), July 12, 2002.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 55 ft³/s, July 10, from rating curve extended above 42 ft³/s on basis of velocity-area study, gage height, 4.56 ft, from floodmarks; minimum daily, 0.01 ft³/s (estimated), July 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e0.05	---	---	---	---	---	e0.05	e0.04	e0.05	e0.03	0.04	e0.03
2	e0.05	---	---	---	---	---	0.05	e0.05	e0.05	e0.03	0.04	e0.04
3	e0.05	---	---	---	---	---	0.08	e0.06	e0.09	e0.03	e0.03	e0.04
4	0.06	---	---	---	---	---	0.12	e0.06	e0.08	e0.02	e0.03	e0.04
5	e0.06	---	---	---	---	---	0.13	e0.06	e0.07	e0.30	e0.03	e0.05
6	e0.06	---	---	---	---	---	e0.19	e0.06	e0.06	e0.10	e0.02	e0.05
7	e0.06	---	---	---	---	---	e0.14	e0.07	e0.05	e0.05	e0.02	e0.05
8	e0.07	---	---	---	---	---	e0.12	e0.06	e0.04	e0.04	e0.03	e0.05
9	e0.07	---	---	---	---	---	e0.10	e0.06	e0.04	e0.04	e0.03	e0.10
10	e0.07	---	---	---	---	---	e0.09	e0.05	e0.04	e0.50	e0.02	e0.14
11	0.07	---	---	---	---	---	e0.07	e0.06	e0.03	e0.05	e0.02	e0.08
12	e0.07	---	---	---	---	---	e0.08	e0.08	e0.03	e0.01	e0.02	e0.07
13	e0.07	---	---	---	---	---	e0.06	e0.06	e0.02	e0.02	e0.02	e0.06
14	e0.07	---	---	---	---	---	e0.06	e0.05	e0.02	e0.04	e0.02	e0.05
15	e0.07	---	---	---	---	---	e0.06	e0.07	e0.02	e0.04	e0.02	e0.05
16	e0.08	---	---	---	---	---	e0.06	e0.06	e0.02	e0.04	e0.03	e0.04
17	0.09	---	---	---	---	---	e0.05	e0.07	e0.02	e0.04	e0.03	e0.04
18	e0.08	---	---	---	---	---	e0.05	e0.07	e0.02	e0.04	e0.03	e0.06
19	e0.09	---	---	---	---	---	e0.05	e0.06	e0.02	e0.03	e0.03	e0.05
20	e0.08	---	---	---	---	---	e0.05	e0.07	e0.02	e0.03	e0.03	e0.04
21	e0.07	---	---	---	---	---	e0.05	e0.07	e0.02	e0.04	e0.03	e0.04
22	e0.08	---	---	---	---	---	e0.05	e0.07	e0.02	e0.03	e0.03	e0.04
23	0.07	---	---	---	---	---	e0.05	0.08	e0.02	e0.03	e0.03	e0.05
24	e0.08	---	---	---	---	---	e0.05	0.08	e0.08	e0.03	e0.03	e0.05
25	e0.07	---	---	---	---	---	e0.05	e0.05	e0.06	e0.03	e0.03	e0.05
26	e0.07	---	---	---	---	---	e0.05	0.13	e0.05	e0.03	e0.03	e0.07
27	e0.07	---	---	---	---	---	e0.05	0.06	e0.05	e0.03	e0.03	e0.08
28	e0.07	---	---	---	---	---	e0.04	0.05	e0.05	e0.03	e0.03	e0.07
29	e0.07	---	---	---	---	---	e0.04	e0.05	e0.05	e0.04	e0.03	e0.07
30	e0.07	---	---	---	---	---	e0.05	0.05	e0.04	e0.04	e0.03	e0.07
31	e0.07	---	---	---	---	---	---	0.05	---	0.04	e0.03	---
TOTAL	2.16	---	---	---	---	---	2.14	1.96	1.23	1.85	0.87	1.72
MEAN	0.070	---	---	---	---	---	0.071	0.063	0.041	0.060	0.028	0.057
MAX	0.09	---	---	---	---	---	0.19	0.13	0.09	0.50	0.04	0.14
MIN	0.05	---	---	---	---	---	0.04	0.04	0.02	0.01	0.02	0.03
AC-FT	4.3	---	---	---	---	---	4.2	3.9	2.4	3.7	1.7	3.4

e Estimated.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1998 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT: April 1998 to current year (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

REMARKS.--Daily suspended-sediment records are poor.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 6,760 mg/L, May 25, 1999; minimum daily mean, 7 mg/L, June 13, 2000.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 2,510 tons (estimated), Apr. 30, 1999; minimum daily, 0.0 ton (most estimated), on many days in 2000 and 2002.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 2,240 mg/L, Apr. 4; minimum daily mean, 129 mg/L, May 30.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 79 tons (estimated), July 10; minimum daily, 0.0 ton (estimated), on many days.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	NITRO-GEN, AMMONIA (MG/L) AS N (00608)	NITRO-GEN, NO2+NO3 (MG/L) AS N (00631)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L) AS P (00671)	PHOS-TOTAL (MG/L) AS P (00665)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	COLI-FORM, FECAL, UM-MF (COLS./ 100 ML) (31625)
OCT 23...	1015	.07	9.7	7.8	432	8.0	E.009	<.05	<.02	.07	e110	400
APR 18...	1000	.05	8.5	7.5	453	11.0	.016	E.03	<.02	.14	e5	e1
JUN 27...	0845	.05	7.4	7.6	465	18.5	.037	<.05	<.02	.21	e270	e310
AUG 22...	1000	.03	7.2	7.6	490	18.5	.023	<.05	<.02	.23	--	e12100

e Estimated value.

E Estimated laboratory analysis value.

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 04...	1015	.06	438	12.5	514	.08
11...	1145	.08	441	13.5	406	.09
23...	1015	.07	432	8.0	405	.08
NOV 05...	1230	.05	432	14.0	116	.02
APR 01...	1345	.05	445	17.5	945	.13
04...	1030	.19	409	15.0	2430	1.2
11...	1215	.06	447	17.5	599	.10
18...	1000	.05	453	11.0	546	.07
23...	0945	.04	456	9.5	795	.09
MAY 08...	1200	.05	460	10.5	298	.04
22...	1045	.07	467	17.0	121	.02
30...	1230	.05	473	28.5	126	.02
JUN 05...	1215	.07	486	26.5	203	.04
14...	1145	.02	467	24.0	60	.0
27...	0845	.05	465	18.5	515	.07
JUL 02...	0930	.03	464	18.5	174	.01
08...	1130	.04	510	28.0	396	.04
12...	1330	.01	561	26.5	126	.0
15...	1000	.04	489	23.5	460	.05
26...	0945	.03	478	18.0	479	.04
30...	0945	.04	472	--	436	.05
AUG 12...	1000	.02	472	18.0	305	.02
19...	1130	.03	476	22.5	581	.05
22...	1000	.03	490	18.5	852	.07
30...	1215	.03	488	25.5	438	.04
SEP 06...	1045	.05	460	21.5	619	.08
20...	1000	.04	453	--	528	.06
24...	1045	.05	452	15.0	293	.04

07103977 COTTONWOOD CREEK AT COWPOKE ROAD AT COLORADO SPRINGS, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	e0.05	---	e0.03	---	---	---	---	---	---
2	e0.05	---	e0.05	---	---	---	---	---	---
3	e0.05	---	e0.06	---	---	---	---	---	---
4	0.06	504	0.08	---	---	---	---	---	---
5	e0.06	---	e0.08	---	---	---	---	---	---
6	e0.06	---	e0.08	---	---	---	---	---	---
7	e0.06	---	e0.08	---	---	---	---	---	---
8	e0.07	---	e0.09	---	---	---	---	---	---
9	e0.07	---	e0.08	---	---	---	---	---	---
10	e0.07	---	e0.08	---	---	---	---	---	---
11	0.07	408	0.08	---	---	---	---	---	---
12	e0.07	---	e0.08	---	---	---	---	---	---
13	e0.07	---	e0.08	---	---	---	---	---	---
14	e0.07	---	e0.08	---	---	---	---	---	---
15	e0.07	---	e0.08	---	---	---	---	---	---
16	e0.08	---	e0.09	---	---	---	---	---	---
17	0.09	---	e0.10	---	---	---	---	---	---
18	e0.08	---	e0.09	---	---	---	---	---	---
19	e0.09	---	e0.10	---	---	---	---	---	---
20	e0.08	---	e0.09	---	---	---	---	---	---
21	e0.07	---	e0.08	---	---	---	---	---	---
22	e0.08	---	e0.09	---	---	---	---	---	---
23	0.07	401	0.08	---	---	---	---	---	---
24	e0.08	---	e0.08	---	---	---	---	---	---
25	e0.07	---	e0.07	---	---	---	---	---	---
26	e0.07	---	e0.07	---	---	---	---	---	---
27	e0.07	---	e0.07	---	---	---	---	---	---
28	e0.07	---	e0.07	---	---	---	---	---	---
29	e0.07	---	e0.07	---	---	---	---	---	---
30	e0.07	---	e0.07	---	---	---	---	---	---
31	e0.07	---	e0.07	---	---	---	---	---	---
TOTAL	2.16	---	2.40	---	---	---	---	---	---

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	JANUARY			FEBRUARY			MARCH		
1	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---

e Estimated.

ARKANSAS RIVER BASIN

07103977 COTTONWOOD CREEK AT COWPOKE ROAD AT COLORADO SPRINGS, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	e0.05	---	e0.14	e0.04	---	e0.06	e0.05	---	e0.02
2	0.05	---	e0.19	e0.05	---	e0.06	e0.05	---	e0.02
3	0.08	---	e0.34	e0.06	---	e0.07	e0.09	---	e0.03
4	0.12	2240	0.61	e0.06	---	e0.07	e0.08	---	e0.04
5	0.13	---	e0.73	e0.06	---	e0.06	e0.07	---	e0.04
6	e0.19	---	e0.82	e0.06	---	e0.06	e0.06	---	e0.03
7	e0.14	---	e0.73	e0.07	---	e0.06	e0.05	---	e0.03
8	e0.12	---	e0.48	e0.06	---	e0.05	e0.04	---	e0.02
9	e0.10	---	e0.33	e0.06	---	e0.05	e0.04	---	e0.02
10	e0.09	---	e0.22	e0.05	---	e0.04	e0.04	---	e0.01
11	e0.07	---	e0.14	e0.06	---	e0.04	e0.03	---	e0.01
12	e0.08	---	e0.12	e0.08	---	e0.05	e0.03	---	e0.00
13	e0.06	---	e0.11	e0.06	---	e0.04	e0.02	---	e0.00
14	e0.06	---	e0.09	e0.05	---	e0.03	e0.02	---	e0.00
15	e0.06	---	e0.09	e0.07	---	e0.03	e0.02	---	e0.00
16	e0.06	---	e0.09	e0.06	---	e0.03	e0.02	---	e0.00
17	e0.05	---	e0.08	e0.07	---	e0.03	e0.02	---	e0.00
18	e0.05	---	e0.08	e0.07	---	e0.03	e0.02	---	e0.01
19	e0.05	---	e0.08	e0.06	---	e0.03	e0.02	---	e0.01
20	e0.05	---	e0.09	e0.07	---	e0.03	e0.02	---	e0.01
21	e0.05	---	e0.09	e0.07	---	e0.03	e0.02	---	e0.02
22	e0.05	---	e0.10	e0.07	---	e0.02	e0.02	---	e0.02
23	e0.05	---	e0.10	0.08	---	e0.02	e0.02	---	e0.02
24	e0.05	---	e0.10	0.08	---	e0.03	e0.08	---	e0.06
25	e0.05	---	e0.10	e0.05	---	e0.02	e0.06	---	e0.08
26	e0.05	---	e0.09	0.13	---	e0.03	e0.05	---	e0.07
27	e0.05	---	e0.09	0.06	---	e0.03	e0.05	---	e0.07
28	e0.04	---	e0.08	0.05	---	e0.02	e0.05	---	e0.06
29	e0.04	---	e0.06	e0.05	---	e0.02	e0.05	---	e0.05
30	e0.05	---	e0.07	0.05	129	0.02	e0.04	---	e0.04
31	---	---	---	0.05	---	e0.02	---	---	---
TOTAL	2.14	---	6.44	1.96	---	1.18	1.23	---	0.79

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	e0.03	---	e0.02	0.04	---	e0.05	e0.03	---	e0.04
2	e0.03	---	e0.02	0.04	---	e0.04	e0.04	---	e0.05
3	e0.03	---	e0.02	e0.03	---	e0.04	e0.04	---	e0.06
4	e0.02	---	e0.02	e0.03	---	e0.03	e0.04	---	e0.06
5	e0.30	---	e0.12	e0.03	---	e0.03	e0.05	---	e0.07
6	e0.10	---	e0.17	e0.02	---	e0.02	e0.05	---	e0.08
7	e0.05	---	e0.07	e0.02	---	e0.02	e0.05	---	e0.08
8	e0.04	---	e0.69	e0.03	---	e0.02	e0.05	---	e0.08
9	e0.04	---	e2.3	e0.03	---	e0.03	e0.10	---	e0.12
10	e0.50	---	e79.0	e0.02	---	e0.02	e0.14	---	e0.19
11	e0.05	---	e37.0	e0.02	---	e0.02	e0.08	---	e0.17
12	e0.01	---	e1.1	e0.02	---	e0.02	e0.07	---	e0.12
13	e0.02	---	e0.00	e0.02	---	e0.02	e0.06	---	e0.10
14	e0.04	---	e0.03	e0.02	---	e0.02	e0.05	---	e0.08
15	e0.04	---	e0.05	e0.02	---	e0.02	e0.05	---	e0.08
16	e0.04	---	e0.05	e0.03	---	e0.03	e0.04	---	e0.07
17	e0.04	---	e0.05	e0.03	---	e0.04	e0.04	---	e0.06
18	e0.04	---	e0.05	e0.03	---	e0.04	e0.06	---	e0.07
19	e0.03	---	e0.04	e0.03	---	e0.05	e0.05	---	e0.08
20	e0.03	---	e0.04	e0.03	---	e0.05	e0.04	---	e0.06
21	e0.04	---	e0.04	e0.03	---	e0.06	e0.04	---	e0.05
22	e0.03	---	e0.04	e0.03	---	e0.07	e0.04	---	e0.04
23	e0.03	---	e0.04	e0.03	---	e0.06	e0.05	---	e0.04
24	e0.03	---	e0.04	e0.03	---	e0.06	e0.05	---	e0.04
25	e0.03	---	e0.04	e0.03	---	e0.06	e0.05	---	e0.04
26	e0.03	---	e0.04	e0.03	---	e0.05	e0.07	---	e0.05
27	e0.03	---	e0.04	e0.03	---	e0.05	e0.08	---	e0.06
28	e0.03	---	e0.04	e0.03	---	e0.04	e0.07	---	e0.06
29	e0.04	---	e0.04	e0.03	---	e0.04	e0.07	---	e0.06
30	e0.04	---	e0.05	e0.03	---	e0.04	e0.07	---	e0.06
31	0.04	---	e0.05	e0.03	---	e0.04	---	---	---
TOTAL	1.85	---	121.30	0.87	---	1.18	1.72	---	2.22

e Estimated.

07103980 COTTONWOOD CREEK AT WOODMEN ROAD NEAR COLORADO SPRINGS, CO

LOCATION.--Lat 38°56'22", long 104°44'26", in NE¹/₄NE¹/₄ sec.11, T.13 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on left bank, 250 ft downstream from Woodmen Road, 4.0 mi east of Interstate 25, 5.0 mi upstream from mouth, and 8.2 mi northeast of courthouse in Colorado Springs.

DRAINAGE AREA.--10.3 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1992 to current year.

REVISED RECORDS.--WDR CO-93-1: Drainage area. WDR CO-96-1: 1995 (M)

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,680 ft above sea level, from topographic map. Prior to Apr. 13, 1999, at site 150 ft upstream at datum 10 ft higher.

REMARKS.--Records fair except for July 10 and estimated daily discharges, which are poor. Natural flow of stream affected by small erosion-control and livestock-watering reservoirs and ground-water withdrawals.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.98	0.65	0.65	0.53	e0.65	e0.85	0.82	0.45	0.67	0.47	0.37	0.48
2	1.1	0.59	0.76	0.50	e0.70	e0.75	0.72	0.51	0.71	0.45	0.35	0.46
3	0.91	0.67	0.76	0.78	e0.75	0.66	0.76	0.50	1.6	0.36	0.47	0.45
4	e1.0	0.69	0.78	0.88	e0.80	0.76	0.64	0.57	1.6	0.31	0.45	0.66
5	e1.0	0.73	0.68	0.87	e0.75	0.83	0.77	0.72	0.54	12	0.29	0.53
6	e1.0	0.66	0.56	0.78	e0.80	0.96	0.81	0.70	0.50	4.7	0.31	0.40
7	e1.0	0.66	0.44	0.85	e0.80	1.0	0.59	0.73	0.52	0.59	0.37	0.39
8	e1.0	0.65	0.46	0.78	e0.85	0.95	0.64	0.87	0.48	0.47	0.76	0.43
9	e1.0	0.65	0.54	0.82	e0.80	1.0	0.80	0.87	0.52	0.45	0.42	2.1
10	e1.0	0.60	0.57	e0.80	e0.80	0.98	0.58	1.2	0.54	6.4	0.35	3.5
11	e1.0	0.68	0.81	0.75	e0.90	0.90	0.46	1.3	0.56	0.39	0.34	0.98
12	e1.0	0.57	0.94	0.64	e0.85	0.76	0.64	2.3	0.89	0.42	0.35	1.4
13	e1.0	0.62	0.99	0.63	0.87	0.73	0.54	0.91	0.72	0.51	0.38	0.70
14	e1.0	0.72	0.78	e0.65	1.1	0.52	0.44	0.99	0.90	0.54	0.32	0.63
15	e1.0	0.56	0.61	e0.65	1.2	1.3	0.37	0.86	0.47	0.54	0.35	0.63
16	e0.90	0.69	0.51	e0.65	1.0	1.3	0.35	2.3	0.40	0.59	0.30	0.63
17	e0.90	0.60	0.54	e0.65	1.0	1.0	0.37	1.0	0.52	0.57	0.32	0.54
18	e0.90	0.83	0.52	e0.65	1.2	0.80	0.41	0.85	0.46	0.56	0.35	1.9
19	0.78	1.1	0.81	e0.60	1.1	0.93	0.38	1.0	0.44	0.41	0.37	0.86
20	0.81	0.75	0.60	e0.60	0.98	0.89	0.47	0.93	0.51	0.51	0.38	0.55
21	0.92	0.70	0.45	e0.70	1.2	0.76	0.51	0.78	0.47	0.73	0.48	0.49
22	1.1	1.0	0.37	e0.75	e1.1	0.80	0.52	0.60	0.40	0.63	0.33	0.47
23	0.98	2.0	0.51	e0.60	e1.0	0.96	0.47	3.0	0.36	0.61	0.31	0.51
24	0.87	1.2	0.56	e0.65	1.0	1.6	0.45	3.8	3.4	0.60	0.36	0.56
25	0.94	0.96	0.57	e0.75	1.00	1.6	0.38	0.66	0.44	0.63	0.33	0.59
26	0.69	1.1	0.76	e0.85	1.1	1.2	0.52	0.58	0.41	0.55	0.32	0.81
27	0.68	0.76	0.86	e0.90	0.95	0.78	0.52	0.58	0.43	0.56	0.40	0.75
28	0.45	0.64	0.95	e0.78	1.0	0.75	0.42	0.64	0.40	0.47	0.60	0.63
29	0.53	0.82	0.89	e0.80	---	0.78	0.28	0.73	0.45	0.44	0.92	0.53
30	0.59	0.90	0.71	e0.75	---	0.75	0.39	0.65	0.53	0.42	0.42	0.59
31	0.61	---	0.57	e0.70	---	0.84	---	0.68	---	0.36	0.45	---
TOTAL	27.64	23.75	20.51	22.29	26.45	28.69	16.02	32.26	20.84	37.24	12.52	24.15
MEAN	0.892	0.792	0.662	0.719	0.945	0.925	0.534	1.041	0.695	1.201	0.404	0.805
MAX	1.1	2.0	0.99	0.90	1.2	1.6	0.82	3.8	3.4	12	0.92	3.5
MIN	0.45	0.56	0.37	0.50	0.65	0.52	0.28	0.45	0.36	0.31	0.29	0.39
AC-FT	55	47	41	44	52	57	32	64	41	74	25	48

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2002, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	
MEAN	1.257	1.124	0.800	0.694	0.810	1.224	1.917	3.328	3.017	2.313	2.443	1.335
MAX	2.59	3.20	1.71	1.36	1.26	3.34	6.42	13.6	8.85	5.07	6.36	2.82
(WY)	1995	1998	2000	1998	1998	1998	1999	1999	1995	1999	1999	1995
MIN	0.35	0.47	0.33	0.33	0.42	0.49	0.50	0.64	0.49	0.24	0.40	0.47
(WY)	1993	1993	1993	1994	1994	1995	1996	1993	1994	1994	2002	1992

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1992 - 2002

ANNUAL TOTAL	560.04	292.36		
ANNUAL MEAN	1.534	0.801		1.732
HIGHEST ANNUAL MEAN				3.63
LOWEST ANNUAL MEAN				0.65
HIGHEST DAILY MEAN	19 Jul 25	12 Jul 5		e100 Apr 30 1999
LOWEST DAILY MEAN	0.37 Dec 22	0.28 Apr 29		a0.15 Jan 23 1995
ANNUAL SEVEN-DAY MINIMUM	0.48 Jan 24	0.34 Aug 11		0.17 Jan 21 1995
MAXIMUM PEAK FLOW		b190 Jul 10		c1090 Jul 19 1993
MAXIMUM PEAK STAGE		5.87 Jul 10		d5.57 Jul 19 1993
ANNUAL RUNOFF (AC-FT)	1110	580		1260
10 PERCENT EXCEEDS	2.9	1.0		3.2
50 PERCENT EXCEEDS	0.98	0.67		0.87
90 PERCENT EXCEEDS	0.57	0.40		0.36

e Estimated.

a Also occurred Jan 23, Feb 3 (estimated), 1996.

b From rating curve extended above 19 ft³/s on basis of velocity-area study.

c From rating curve extended above 1.1 ft³/s on basis of slope-area measurement of peak flow at gage height 4.45 ft, site and datum then in use.

d From floodmarks, site and datum then in use. Maximum gage height, 7.84 ft, May 25, 1999.

ARKANSAS RIVER BASIN

07103980 COTTONWOOD CREEK AT WOODMEN ROAD NEAR COLORADO SPRINGS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1998 to current year (seasonal peaks only).

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDEED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEED (T/DAY) (80155)
OCT						
04...	1125	1.0	675	16.0	--	--
18...	1130	1.0	714	12.0	--	--
NOV						
05...	1410	.82	685	13.0	--	--
30...	1250	1.1	744	4.5	--	--
DEC						
21...	0900	.61	783	2.0	--	--
JAN						
08...	1030	.82	738	3.0	--	--
FEB						
14...	1200	1.1	718	1.5	--	--
MAR						
19...	1200	1.4	680	12.0	--	--
JUN						
24...	1400	27	171	20.0	3030	221
SEP						
10...	1245	1.9	474	16.5	291	1.5

07103985 COTTONWOOD CREEK TRIBUTARY ABOVE RANGWOOD DRIVE AT COLORADO SPRINGS, CO

LOCATION.--Lat 38°55'45", long 104°44'48", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.11, T.13S., R.66W., El Paso County, Hydrologic Unit 11020003, on right bank 400 ft upstream from Dublin Road at Colorado Springs (revised), 0.2 mi upstream from Rangewood Drive, 0.5 mi upstream from mouth, and 3.2 mi east of Interstate 25.

DRAINAGE AREA.--2.81 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1998 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 6,630 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records fair except for July 5-6, which are poor. Natural flow of stream affected by erosion-control and livestock-watering reservoirs.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 2,960 ft³/s, July 13, 2001, gage height, 8.76 ft, from rating curve extended above 65 ft³/s on basis of slope-area measurement of peak flow at gage height 8.75 feet; minimum daily, 0.18 ft³/s, April 18, 1999.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 948 ft³/s, July 5, gage height, 7.87 ft, from rating curve extended above 65 ft³/s on basis of slope-area measurement of peak flow at gage height 8.75 feet; minimum daily, 0.45 ft³/s, Apr. 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	---	---	---	---	---	0.46	0.47	0.64	0.64	0.76	0.72
2	1.2	---	---	---	---	---	0.46	0.48	0.63	0.64	0.77	0.72
3	1.2	---	---	---	---	---	0.67	0.47	1.9	0.65	1.0	0.76
4	1.2	---	---	---	---	---	0.45	0.47	0.99	0.66	0.89	0.79
5	1.2	---	---	---	---	---	0.46	0.47	0.72	39	0.80	0.71
6	1.2	---	---	---	---	---	0.46	0.49	0.72	11	0.77	0.71
7	1.1	---	---	---	---	---	0.46	0.52	0.73	1.0	0.73	0.71
8	1.1	---	---	---	---	---	0.49	0.52	0.73	0.91	0.85	0.78
9	1.1	---	---	---	---	---	0.46	0.52	0.71	0.95	0.81	1.7
10	1.1	---	---	---	---	---	0.46	0.53	0.71	2.2	0.77	2.6
11	1.1	---	---	---	---	---	0.46	0.53	0.69	0.73	0.74	0.71
12	1.1	---	---	---	---	---	0.46	0.96	1.8	0.67	0.69	1.1
13	1.1	---	---	---	---	---	0.46	0.62	0.79	0.75	0.69	0.78
14	1.1	---	---	---	---	---	0.46	0.61	2.1	0.79	0.69	0.66
15	1.1	---	---	---	---	---	0.46	0.61	0.68	0.78	0.71	0.67
16	1.1	---	---	---	---	---	0.47	1.5	0.65	0.75	0.73	0.71
17	1.1	---	---	---	---	---	0.48	0.60	0.65	0.78	0.69	0.74
18	1.0	---	---	---	---	---	0.48	0.56	0.65	0.79	0.72	1.8
19	1.0	---	---	---	---	---	0.48	0.60	0.67	0.75	0.66	0.74
20	1.1	---	---	---	---	---	0.51	0.61	0.65	0.72	0.66	0.71
21	1.1	---	---	---	---	---	0.48	0.63	0.66	0.93	0.75	0.76
22	1.1	---	---	---	---	---	0.48	0.64	0.70	0.80	0.68	0.73
23	1.1	---	---	---	---	---	0.47	2.6	0.66	0.75	0.67	0.66
24	1.1	---	---	---	---	---	0.47	3.1	1.1	0.80	0.70	0.66
25	1.0	---	---	---	---	---	0.48	0.64	0.67	0.76	0.69	0.65
26	1.0	---	---	---	---	---	0.49	0.63	0.68	0.77	0.67	0.81
27	1.0	---	---	---	---	---	0.49	0.65	0.68	0.77	0.69	0.77
28	1.0	---	---	---	---	---	0.48	0.64	0.67	0.78	0.74	0.58
29	1.00	---	---	---	---	---	0.47	0.63	0.67	0.77	0.67	0.54
30	1.0	---	---	---	---	---	0.47	0.62	0.65	0.76	0.67	0.52
31	1.00	---	---	---	---	---	---	0.62	---	0.76	0.69	---
TOTAL	33.80	---	---	---	---	---	14.33	23.54	24.95	73.81	22.75	25.50
MEAN	1.090	---	---	---	---	---	0.478	0.759	0.832	2.381	0.734	0.850
MAX	1.2	---	---	---	---	---	0.67	3.1	2.1	39	1.0	2.6
MIN	1.0	---	---	---	---	---	0.45	0.47	0.63	0.64	0.66	0.52
AC-FT	67	---	---	---	---	---	28	47	49	146	45	51

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1998 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT: April 1998 to current year (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

REMARKS.--Daily suspended-sediment records are fair.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 8,990 mg/L, Apr. 30, 1999; minimum daily mean, 1 mg/L, June 11, Sept. 24-25, 2002.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 1,250 tons, June 7, 2001; minimum daily, 0.0 ton, on many days (some estimated) in 1999, 2000, and 2002.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 1,750 mg/L, July 5; minimum daily mean, 1 mg/L, June 11, Sept. 24-25.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 1,170 tons, July 5; minimum daily, 0.0 ton, on many days (some estimated).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)
OCT 23...	1130	1.1	1170	8.3	13.0	10.5	<110	<330	6.24	.048	E.04	E.01
APR 18...	1100	.48	1060	8.2	13.5	8.7	32	e22	5.15	.055	<.06	E.01
JUN 27...	0945	.68	1050	8.3	17.5	8.3	280	150	5.39	.040	E.05	.03
AUG 22...	1030	.68	1040	8.3	18.0	8.0	900	--	5.32	E.012	E.04	.02

e Estimated value.

E Estimated laboratory analysis value.

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE (DEG C) (00010)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 04...	1400	1.2	1120	18.5	3.0	.01
11...	1430	1.1	1150	14.5	2.0	.01
23...	1130	1.1	1170	13.0	7.0	.02
NOV 05...	1430	.92	1110	13.5	8.0	.02
APR 01...	1200	.46	1140	16.0	17	.02
18...	1045	.48	1060	13.5	18	.02
23...	1100	.48	1040	13.5	23	.03
MAY 08...	1330	.52	1030	12.5	14	.02
21...	1200	.63	1080	18.5	8.0	.01
JUN 05...	1300	.68	1020	23.0	15	.03
24...	1200	.66	1020	21.0	4.0	.01
27...	0945	.68	1050	17.5	6.0	.01
JUL 08...	1015	.92	1060	19.5	204	.51
17...	1130	.74	1050	22.0	21	.04
AUG 02...	0945	.77	1060	15.5	46	.10
15...	1130	.74	1050	20.5	9.0	.02
SEP 06...	1200	.71	1020	21.0	3.0	.01
19...	1015	.77	989	--	11	.02

07103985 COTTONWOOD CREEK TRIBUTARY ABOVE RANGEWOOD DRIVE AT COLORADO SPRINGS, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	1.2	4	0.01	---	---	---	---	---	---
2	1.2	6	0.02	---	---	---	---	---	---
3	1.2	3	0.01	---	---	---	---	---	---
4	1.2	4	0.01	---	---	---	---	---	---
5	1.2	---	e0.02	---	---	---	---	---	---
6	1.2	4	0.01	---	---	---	---	---	---
7	1.1	3	0.01	---	---	---	---	---	---
8	1.1	3	0.01	---	---	---	---	---	---
9	1.1	3	0.01	---	---	---	---	---	---
10	1.1	---	e0.01	---	---	---	---	---	---
11	1.1	4	0.01	---	---	---	---	---	---
12	1.1	6	0.02	---	---	---	---	---	---
13	1.1	---	e0.02	---	---	---	---	---	---
14	1.1	7	0.02	---	---	---	---	---	---
15	1.1	---	e0.02	---	---	---	---	---	---
16	1.1	---	e0.02	---	---	---	---	---	---
17	1.1	8	0.02	---	---	---	---	---	---
18	1.0	5	0.01	---	---	---	---	---	---
19	1.0	---	e0.01	---	---	---	---	---	---
20	1.1	---	e0.01	---	---	---	---	---	---
21	1.1	6	0.02	---	---	---	---	---	---
22	1.1	---	e0.02	---	---	---	---	---	---
23	1.1	7	0.02	---	---	---	---	---	---
24	1.1	---	e0.02	---	---	---	---	---	---
25	1.0	---	e0.02	---	---	---	---	---	---
26	1.0	---	e0.02	---	---	---	---	---	---
27	1.0	---	e0.02	---	---	---	---	---	---
28	1.0	---	e0.02	---	---	---	---	---	---
29	1.00	---	e0.02	---	---	---	---	---	---
30	1.0	---	e0.02	---	---	---	---	---	---
31	1.00	---	e0.02	---	---	---	---	---	---
TOTAL	33.80	---	0.50	---	---	---	---	---	---

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	JANUARY			FEBRUARY			MARCH		
1	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---

e Estimated.

ARKANSAS RIVER BASIN

07103985 COTTONWOOD CREEK TRIBUTARY ABOVE RANGEWOOD DRIVE AT COLORADO SPRINGS, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	0.46	25	0.03	0.47	---	e0.06	0.64	---	e0.00
2	0.46	46	0.06	0.48	32	0.04	0.63	4	0.00
3	0.67	---	e0.36	0.47	25	0.03	1.9	38	1.5
4	0.45	166	0.20	0.47	26	0.03	0.99	37	0.12
5	0.46	---	e0.14	0.47	19	0.02	0.72	18	0.03
6	0.46	---	e0.08	0.49	---	e0.02	0.72	2	0.00
7	0.46	35	0.04	0.52	14	0.02	0.73	2	0.00
8	0.49	29	0.04	0.52	24	0.03	0.73	2	0.00
9	0.46	---	e0.04	0.52	74	0.10	0.71	2	0.00
10	0.46	---	e0.05	0.53	63	0.09	0.71	---	e0.00
11	0.46	46	0.06	0.53	---	e0.06	0.69	1	0.00
12	0.46	31	0.04	0.96	91	0.35	1.8	199	2.9
13	0.46	26	0.03	0.62	---	e0.08	0.79	---	e0.33
14	0.46	---	e0.03	0.61	46	0.08	2.1	357	16.0
15	0.46	---	e0.02	0.61	57	0.09	0.68	---	e0.00
16	0.47	---	e0.02	1.5	319	4.4	0.65	---	e0.00
17	0.48	16	0.02	0.60	156	0.30	0.65	---	e0.00
18	0.48	18	0.02	0.56	---	e0.09	0.65	---	e0.00
19	0.48	14	0.02	0.60	---	e0.06	0.67	---	e0.00
20	0.51	11	0.01	0.61	---	e0.04	0.65	---	e0.00
21	0.48	---	e0.02	0.63	11	0.02	0.66	---	e0.00
22	0.48	---	e0.02	0.64	14	0.02	0.70	4	0.00
23	0.47	32	0.04	2.6	110	3.9	0.66	5	0.00
24	0.47	74	0.09	3.1	579	20.0	1.1	81	0.95
25	0.48	60	0.08	0.64	267	0.46	0.67	---	e0.05
26	0.49	---	e0.07	0.63	---	e0.30	0.68	10	0.02
27	0.49	55	0.07	0.65	71	0.13	0.68	5	0.00
28	0.48	65	0.08	0.64	15	0.03	0.67	5	0.00
29	0.47	75	0.10	0.63	14	0.02	0.67	4	0.00
30	0.47	59	0.08	0.62	10	0.02	0.65	---	e0.00
31	---	---	---	0.62	---	e0.01	---	---	---
TOTAL	14.33	---	1.96	23.54	---	30.90	24.95	---	21.90
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	0.64	3	0.00	0.76	50	0.10	0.72	10	0.02
2	0.64	3	0.00	0.77	46	0.10	0.72	8	0.02
3	0.65	3	0.00	1.0	78	0.27	0.76	---	e0.01
4	0.66	---	e0.00	0.89	---	e0.24	0.79	4	0.00
5	39	1750	1170	0.80	---	e0.21	0.71	3	0.00
6	11	734	68.0	0.77	---	e0.19	0.71	2	0.00
7	1.0	---	e0.76	0.73	---	e0.18	0.71	---	e0.00
8	0.91	245	0.60	0.85	---	e0.24	0.78	---	e0.05
9	0.95	207	0.54	0.81	---	e0.17	1.7	---	e1.9
10	2.2	175	3.3	0.77	---	e0.16	2.6	381	4.2
11	0.73	---	e0.33	0.74	62	0.13	0.71	19	0.04
12	0.67	---	e0.30	0.69	21	0.04	1.1	---	e0.15
13	0.75	---	e0.33	0.69	---	e0.02	0.78	---	e0.02
14	0.79	---	e0.35	0.69	---	e0.02	0.66	---	e0.00
15	0.78	---	e0.35	0.71	10	0.02	0.67	---	e0.00
16	0.75	114	0.23	0.73	---	e0.02	0.71	---	e0.00
17	0.78	34	0.07	0.69	---	e0.03	0.74	---	e0.00
18	0.79	67	0.14	0.72	---	e0.03	1.8	---	e0.25
19	0.75	---	e0.15	0.66	---	e0.03	0.74	9	0.02
20	0.72	---	e0.14	0.66	18	0.03	0.71	4	0.00
21	0.93	---	e0.39	0.75	32	0.08	0.76	---	e0.00
22	0.80	---	e0.17	0.68	24	0.04	0.73	2	0.00
23	0.75	---	e0.14	0.67	---	e0.03	0.66	---	e0.00
24	0.80	---	e0.15	0.70	---	e0.03	0.66	1	0.00
25	0.76	---	e0.13	0.69	---	e0.03	0.65	1	0.00
26	0.77	---	e0.13	0.67	---	e0.02	0.81	7	0.03
27	0.77	58	0.12	0.69	---	e0.02	0.77	11	0.06
28	0.78	51	0.11	0.74	---	e0.07	0.58	---	e0.00
29	0.77	30	0.06	0.67	---	e0.02	0.54	---	e0.00
30	0.76	---	e0.07	0.67	9	0.02	0.52	---	e0.00
31	0.76	44	0.09	0.69	11	0.02	---	---	---
TOTAL	73.81	---	1247.15	22.75	---	2.61	25.50	---	6.77

e Estimated.

07103985 COTTONWOOD CREEK TRIBUTARY ABOVE RANGEWOOD DRIVE AT COLORADO SPRINGS, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April to September 2001 (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published during period of operation are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 2.43 inches, July 9, 2001.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 2.10 inches, July 5.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00	0.00
3	0.00	---	---	---	---	---	0.00	0.00	0.27	0.00	0.09	0.00
4	0.00	---	---	---	---	---	0.00	0.00	0.08	0.00	0.06	0.00
5	0.00	---	---	---	---	---	0.00	0.00	0.01	2.10	0.00	0.00
6	0.00	---	---	---	---	---	0.00	0.00	0.00	0.70	0.00	0.00
7	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	---	---	---	---	---	0.09	0.00	0.00	0.00	0.16	0.00
9	0.00	---	---	---	---	---	0.00	0.00	0.00	0.03	0.02	0.36
10	0.00	---	---	---	---	---	0.00	0.00	0.00	0.41	0.00	0.47
11	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.02
12	0.00	---	---	---	---	---	0.01	0.31	0.20	0.00	0.00	0.19
13	0.00	---	---	---	---	---	0.00	0.00	0.07	0.00	0.00	0.01
14	0.00	---	---	---	---	---	0.00	0.00	0.24	0.00	0.00	0.00
15	0.00	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00	0.00
16	0.00	---	---	---	---	---	0.00	0.29	0.00	0.00	0.00	0.00
17	0.00	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00	0.00
18	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.37
19	0.00	---	---	---	---	---	0.00	0.02	0.00	0.00	0.00	0.00
20	0.00	---	---	---	---	---	0.02	0.00	0.01	0.00	0.00	0.00
21	0.00	---	---	---	---	---	0.01	0.00	0.01	0.09	0.05	0.00
22	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.01	0.00
23	0.00	---	---	---	---	---	0.00	0.52	0.00	0.00	0.02	0.00
24	0.00	---	---	---	---	---	0.00	0.38	0.35	0.00	0.00	0.00
25	0.00	---	---	---	---	---	0.00	0.00	0.01	0.00	0.00	0.00
26	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.10
27	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.01	0.08
28	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.03	0.00
29	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.04	0.00
30	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	0.00	---	---	---	---	---	0.13	1.55	1.25	3.33	0.49	1.60
MAX	0.00	---	---	---	---	---	0.09	0.52	0.35	2.10	0.16	0.47

07103990 COTTONWOOD CREEK AT MOUTH AT PIKEVIEW, CO

LOCATION.--Lat 38°55'41", long 104°48'35", in SW¹/₄SW¹/₄ sec.8, T.13 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on left bank 20 ft upstream from Vincent Drive bridge, 0.3 mi south of Woodmen Road, 0.3 mi upstream from mouth, and 1.2 mi northeast of Pikeview (revised).

DRAINAGE AREA.--18.7 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1985 to current year.

GAGE.--Water-stage recorder with satellite telemetry, crest-stage gage, and concrete control. Elevation of gage is 6,265 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges and those below 15 ft³/s, which are poor. Natural flow of stream affected by erosion-control and livestock-watering reservoirs and ground-water withdrawals.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	6.7	6.0	e4.2	e4.5	e4.8	3.3	4.4	2.6	3.9	3.9	3.5
2	7.9	6.7	5.6	e4.2	e4.6	e4.7	3.4	5.4	2.7	3.0	3.8	3.7
3	7.9	6.5	5.1	e4.4	e4.8	e4.6	3.7	4.8	6.8	3.1	4.5	3.8
4	7.7	6.8	6.0	e4.6	e4.4	e4.7	3.5	4.5	11	3.3	4.5	3.4
5	7.6	6.9	6.4	e4.6	e5.1	e4.7	3.3	4.7	3.0	140	3.8	3.6
6	7.4	7.4	6.5	e4.6	e5.5	e4.8	4.0	4.2	2.5	41	3.7	3.5
7	7.5	7.3	5.7	e4.6	e5.0	e4.2	3.5	4.6	2.5	3.3	3.6	3.4
8	7.3	6.8	4.2	e4.8	e4.1	e4.8	4.8	4.4	2.6	3.0	5.2	3.8
9	7.3	6.9	4.3	5.3	e5.2	e4.6	4.3	3.9	2.4	4.2	3.8	16
10	7.1	6.9	e4.6	e5.0	e5.5	e4.5	3.9	4.6	2.5	26	3.7	27
11	6.6	5.6	3.2	e6.2	e5.7	3.5	3.6	4.6	3.0	3.4	3.6	3.3
12	6.2	6.8	4.4	e5.8	e5.4	3.6	4.1	12	9.6	2.7	3.6	5.5
13	6.3	7.1	4.8	e5.1	e5.2	3.8	4.1	3.7	4.0	3.0	3.8	6.3
14	6.6	7.1	e5.0	e4.9	e5.0	4.1	3.8	4.7	15	3.2	3.7	4.2
15	6.7	7.2	e5.2	e4.6	e5.2	e4.9	3.3	4.1	2.9	3.5	3.8	3.7
16	6.5	7.8	e5.4	e4.8	e4.7	e5.2	4.2	11	3.1	3.9	3.8	3.8
17	6.5	7.7	e6.0	e4.3	e4.5	e4.0	4.4	7.3	2.7	3.8	3.7	3.8
18	6.4	7.0	4.8	e4.5	4.4	3.7	4.0	4.0	2.6	3.7	4.0	17
19	6.1	6.5	5.6	e5.0	4.5	4.0	3.9	3.4	2.3	3.8	3.7	e5.2
20	6.5	5.6	e5.4	e4.9	4.8	3.4	4.7	3.4	2.6	3.7	4.0	3.2
21	6.3	5.8	e6.0	e4.9	5.0	4.1	3.7	3.7	2.7	4.7	4.3	3.3
22	6.0	7.1	e6.0	e4.9	5.0	4.1	3.8	2.9	2.5	5.2	3.8	3.5
23	5.9	13	e6.2	e4.6	4.8	4.3	4.1	16	2.8	4.2	3.6	3.5
24	5.9	5.3	e5.6	e5.0	5.3	e10	4.4	28	11	4.2	3.8	3.4
25	5.3	5.3	e5.4	e6.5	e4.7	e8.6	4.2	3.4	e3.1	3.9	3.8	3.5
26	5.8	6.3	e5.2	4.7	e4.5	7.2	4.1	3.0	e2.9	4.2	3.6	7.6
27	6.5	4.3	e5.0	4.4	e4.9	3.9	4.1	2.7	e3.2	4.1	4.0	5.4
28	6.6	4.7	e5.6	4.7	e5.0	3.4	4.7	3.1	3.6	4.3	4.2	4.6
29	6.5	6.9	e5.0	e5.3	---	3.1	4.0	2.6	3.1	4.0	5.1	4.8
30	6.8	6.5	e4.6	e5.0	---	3.3	3.7	3.2	4.0	3.9	4.0	3.7
31	6.9	---	e4.4	e4.7	---	3.3	---	3.0	---	3.7	3.4	---
TOTAL	208.6	202.5	163.2	151.1	137.3	141.9	118.6	175.3	125.3	311.9	121.8	171.0
MEAN	6.73	6.75	5.26	4.87	4.90	4.58	3.95	5.65	4.18	10.1	3.93	5.70
MAX	8.0	13	6.5	6.5	5.7	10	4.8	28	15	140	5.2	27
MIN	5.3	4.3	3.2	4.2	4.1	3.1	3.3	2.6	2.3	2.7	3.4	3.2
AC-FT	414	402	324	300	272	281	235	348	249	619	242	339

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2002, BY WATER YEAR (WY)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	5.81	5.22	4.50	4.35	4.57	5.47	6.90	9.59	9.66	9.94	9.40	6.47					
MAX	9.59	9.18	7.90	7.60	7.56	11.1	33.3	40.7	26.4	26.2	27.7	13.9					
(WY)	1995	1998	1998	2000	2000	1992	1999	1999	1995	2001	1999	1999					
MIN	1.93	2.90	1.92	2.30	2.28	2.57	3.31	2.71	3.05	2.34	3.93	2.67					
(WY)	1987	1987	1992	1987	1990	1999	1989	1986	1990	1992	2002	1986					

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1986 - 2002	
ANNUAL TOTAL	3563.3		2028.5			
ANNUAL MEAN	9.76		5.56		6.99	
HIGHEST ANNUAL MEAN					15.7	
LOWEST ANNUAL MEAN					4.01	
HIGHEST DAILY MEAN	170	Jul 13	140	Jul 5	e500	Apr 30 1999
LOWEST DAILY MEAN	3.2	Dec 11	2.3	Jun 19	a0.01	Jul 10 1989
ANNUAL SEVEN-DAY MINIMUM	3.7	Apr 3	2.6	Jun 17	0.12	Jul 5 1989
MAXIMUM PEAK FLOW			b2120		Jul 5	
MAXIMUM PEAK STAGE			8.10		Jul 5	
ANNUAL RUNOFF (AC-FT)	7070		4020		c,d9.53	
10 PERCENT EXCEEDS	13		7.1		10	
50 PERCENT EXCEEDS	6.6		4.5		4.8	
90 PERCENT EXCEEDS	3.9		3.2		2.5	

e Estimated.

a Also occurred Jul 11, 1989

b From rating curve extended above 900 ft³/s, on basis of critical-depth measurement of peak flow at gage height 9.02 ft.

c Also occurred Jul 13, 2001.

d From floodmarks.

07103990 COTTONWOOD CREEK AT MOUTH AT PIKEVIEW, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1998 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT: April 1998 to current year (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

REMARKS.--Daily suspended-sediment records are fair.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 7,870 mg/L, May 25, 1999; minimum daily mean, 96 mg/L, Oct. 2, 2001.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 13,500 tons (estimated), April 30, 1999; minimum daily, 1.1 tons (estimated), Sept. 30, 2002.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 1,850 mg/L, July 10; minimum daily mean, 96 mg/L, Oct. 2.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 4,880 tons (estimated), July 5; minimum daily, 1.1 tons (estimated), Sept. 30.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD) UNITS (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	NITRO-AMMONIA DIS-SOLVED (MG/L) (00608)	NITRO-NO2+NO3 DIS-SOLVED (MG/L) (00631)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L) (00671)	PHOS-PHORUS TOTAL (MG/L) (00665)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)
OCT 23...	1245	5.7	8.9	8.5	756	15.0	.024	5.09	<.02	.10	e170	e250
APR 18...	1200	3.6	7.4	8.4	684	18.5	.021	5.08	<.02	.14	11	e4
JUN 27...	1100	2.5	6.9	8.5	693	24.5	E.012	4.61	.02	.15	e260	600
AUG 22...	1115	2.5	7.4	8.4	704	22.0	E.008	4.70	<.02	.12	--	680

e Estimated value.

E Estimated laboratory analysis value.

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 04...	0930	6.5	752	10.0	104	1.8
18...	1345	5.7	752	14.0	202	3.1
23...	1245	5.7	756	15.0	284	4.4
31...	0930	5.7	749	8.0	192	3.4
NOV 06...	1045	7.8	752	10.5	--	--
DEC 17...	1030	6.5	731	.0	266	4.7
JAN 08...	0945	4.2	726	.5	719	8.2
25...	1045	7.0	542	.5	--	--
MAR 19...	1030	4.2	706	9.0	670	7.6
APR 01...	1045	3.6	697	15.0	497	4.8
18...	1200	3.6	684	18.5	394	3.8
23...	1230	4.9	682	19.0	336	4.4
MAY 09...	1115	4.2	676	14.0	326	3.7
21...	1030	3.6	672	16.5	344	3.3
JUN 14...	1300	3.0	680	26.5	235	1.9
24...	1645	66	272	17.5	6420	1140
27...	1100	2.5	693	24.5	263	1.8
28...	1000	3.6	692	21.0	247	2.4
JUL 09...	1215	4.2	717	27.0	326	3.7
26...	1115	3.6	699	23.5	356	3.5
AUG 12...	1230	3.6	695	25.5	196	1.9
22...	1115	2.5	704	22.0	248	1.7
SEP 06...	1400	3.6	671	26.0	184	1.8
19...	1315	3.0	630	--	149	1.2

ARKANSAS RIVER BASIN

07103990 COTTONWOOD CREEK AT MOUTH AT PIKEVIEW, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	8.0	---	e1.9	6.7	---	---	6.0	---	---
2	7.9	96	1.9	6.7	---	---	5.6	---	---
3	7.9	111	2.4	6.5	---	---	5.1	---	---
4	7.7	110	2.3	6.8	---	---	6.0	---	---
5	7.6	129	2.6	6.9	---	---	6.4	---	---
6	7.4	---	e2.8	7.4	---	---	6.5	---	---
7	7.5	154	3.1	7.3	---	---	5.7	---	---
8	7.3	182	3.6	6.8	---	---	4.2	---	---
9	7.3	193	3.8	6.9	---	---	4.3	---	---
10	7.1	168	3.2	6.9	---	---	e4.6	---	---
11	6.6	---	e3.5	5.6	---	---	3.2	---	---
12	6.2	222	3.7	6.8	---	---	4.4	---	---
13	6.3	191	3.2	7.1	---	---	4.8	---	---
14	6.6	174	3.1	7.1	---	---	e5.0	---	---
15	6.7	163	2.9	7.2	---	---	e5.2	---	---
16	6.5	---	e3.9	7.8	---	---	e5.4	---	---
17	6.5	274	4.8	7.7	---	---	e6.0	---	---
18	6.4	213	3.7	7.0	---	---	4.8	---	---
19	6.1	195	3.2	6.5	---	---	5.6	---	---
20	6.5	205	3.6	5.6	---	---	e5.4	---	---
21	6.3	---	e4.0	5.8	---	---	e6.0	---	---
22	6.0	272	4.2	7.1	---	---	e6.0	---	---
23	5.9	282	4.3	13	---	---	e6.2	---	---
24	5.9	279	4.3	5.3	---	---	e5.6	---	---
25	5.3	265	3.6	5.3	---	---	e5.4	---	---
26	5.8	---	e3.7	6.3	---	---	e5.2	---	---
27	6.5	---	e4.0	4.3	---	---	e5.0	---	---
28	6.6	216	4.1	4.7	---	---	e5.6	---	---
29	6.5	179	3.3	6.9	---	---	e5.0	---	---
30	6.8	177	3.4	6.5	---	---	e4.6	---	---
31	6.9	191	3.6	---	---	---	e4.4	---	---
TOTAL	208.6	---	105.7	202.5	---	---	163.2	---	---
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	JANUARY			FEBRUARY			MARCH		
1	e4.2	---	---	e4.5	---	---	e4.8	---	---
2	e4.2	---	---	e4.6	---	---	e4.7	---	---
3	e4.4	---	---	e4.8	---	---	e4.6	---	---
4	e4.6	---	---	e4.4	---	---	e4.7	---	---
5	e4.6	---	---	e5.1	---	---	e4.7	---	---
6	e4.6	---	---	e5.5	---	---	e4.8	---	---
7	e4.6	---	---	e5.0	---	---	e4.2	---	---
8	e4.8	---	---	e4.1	---	---	e4.8	---	---
9	5.3	---	---	e5.2	---	---	e4.6	---	---
10	e5.0	---	---	e5.5	---	---	e4.5	---	---
11	e6.2	---	---	e5.7	---	---	3.5	---	---
12	e5.8	---	---	e5.4	---	---	3.6	---	---
13	e5.1	---	---	e5.2	---	---	3.8	---	---
14	e4.9	---	---	e5.0	---	---	4.1	---	---
15	e4.6	---	---	e5.2	---	---	e4.9	---	---
16	e4.8	---	---	e4.7	---	---	e5.2	---	---
17	e4.3	---	---	e4.5	---	---	e4.0	---	---
18	e4.5	---	---	4.4	---	---	3.7	---	---
19	e5.0	---	---	4.5	---	---	4.0	---	---
20	e4.9	---	---	4.8	---	---	3.4	---	---
21	e4.9	---	---	5.0	---	---	4.1	---	---
22	e4.9	---	---	5.0	---	---	4.1	---	---
23	e4.6	---	---	4.8	---	---	4.3	---	---
24	e5.0	---	---	5.3	---	---	e10	---	---
25	e6.5	---	---	e4.7	---	---	e8.6	---	---
26	4.7	---	---	e4.5	---	---	7.2	---	---
27	4.4	---	---	e4.9	---	---	3.9	---	---
28	4.7	---	---	e5.0	---	---	3.4	---	---
29	e5.3	---	---	---	---	---	3.1	---	---
30	e5.0	---	---	---	---	---	3.3	---	---
31	e4.7	---	---	---	---	---	3.3	---	---
TOTAL	151.1	---	---	137.3	---	---	141.9	---	---

e Estimated.

07103990 COTTONWOOD CREEK AT MOUTH AT PIKEVIEW, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3.3	602	5.4	4.4	---	e4.2	2.6	283	2.0
2	3.4	691	6.2	5.4	310	4.5	2.7	278	2.0
3	3.7	770	7.7	4.8	---	e4.2	6.8	---	e49.0
4	3.5	---	e8.0	4.5	---	e4.4	11	1120	68.0
5	3.3	---	e7.9	4.7	390	4.9	3.0	---	e4.1
6	4.0	950	10.0	4.2	---	e4.2	2.5	---	e3.4
7	3.5	---	e8.9	4.6	---	e4.4	2.5	---	e3.4
8	4.8	---	e14.0	4.4	---	e4.0	2.6	---	e3.6
9	4.3	---	e17.0	3.9	301	3.2	2.4	478	3.1
10	3.9	1540	16.0	4.6	343	4.3	2.5	---	e2.6
11	3.6	1080	11.0	4.6	299	3.7	3.0	300	2.4
12	4.1	---	e9.9	12	---	e27.0	9.6	1120	120
13	4.1	---	e8.0	3.7	---	e1.9	4.0	---	e9.0
14	3.8	---	e6.0	4.7	---	e2.3	15	1300	215
15	3.3	516	4.6	4.1	---	e1.9	2.9	---	e3.2
16	4.2	629	7.2	11	---	e29.0	3.1	---	e3.3
17	4.4	---	e6.2	7.3	---	e27.0	2.7	---	e2.7
18	4.0	452	4.8	4.0	899	9.7	2.6	---	e2.5
19	3.9	---	e4.7	3.4	---	e7.2	2.3	---	e2.2
20	4.7	438	5.5	3.4	577	5.3	2.6	---	e2.3
21	3.7	427	4.2	3.7	384	3.8	2.7	---	e2.3
22	3.8	308	3.2	2.9	342	2.7	2.5	---	e2.0
23	4.1	387	4.2	16	1700	432	2.8	---	e2.1
24	4.4	---	e7.0	28	---	e604	11	804	128
25	4.2	---	e6.7	3.4	---	e3.0	e3.1	---	e2.6
26	4.1	549	6.1	3.0	---	e2.6	e2.9	---	e2.3
27	4.1	383	4.3	2.7	---	e2.3	e3.2	260	2.2
28	4.7	---	e4.5	3.1	---	e2.5	3.6	303	2.8
29	4.0	---	e4.3	2.6	---	e2.1	3.1	527	4.4
30	3.7	404	4.1	3.2	---	e2.6	4.0	519	5.6
31	---	---	---	3.0	---	e2.4	---	---	---
TOTAL	118.6	---	217.6	175.3	---	1217.3	125.3	---	658.1

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3.9	---	e4.2	3.9	296	3.1	3.5	---	e2.4
2	3.0	268	2.2	3.8	---	e3.2	3.7	273	2.8
3	3.1	---	e1.7	4.5	354	4.3	3.8	291	2.9
4	3.3	---	e1.7	4.5	361	4.4	3.4	395	3.7
5	140	---	e4880	3.8	276	2.9	3.6	326	3.2
6	41	---	e202	3.7	243	2.4	3.5	197	1.9
7	3.3	---	e2.9	3.6	---	e2.7	3.4	218	2.0
8	3.0	---	e2.5	5.2	402	9.0	3.8	214	2.2
9	4.2	346	4.7	3.8	307	3.2	16	602	54.0
10	26	1850	536	3.7	212	2.1	27	---	e117
11	3.4	---	e4.7	3.6	208	2.0	3.3	---	e1.9
12	2.7	---	e3.6	3.6	227	2.2	5.5	---	e23.0
13	3.0	---	e3.9	3.8	321	3.3	6.3	---	e16.0
14	3.2	---	e4.0	3.7	269	2.7	4.2	202	2.3
15	3.5	---	e4.4	3.8	197	2.0	3.7	---	e1.8
16	3.9	---	e4.7	3.8	195	2.0	3.8	---	e1.8
17	3.8	439	4.4	3.7	---	e2.3	3.8	160	1.6
18	3.7	---	e4.3	4.0	241	2.6	17	573	60.0
19	3.8	409	4.2	3.7	195	2.0	e5.2	239	4.0
20	3.7	346	3.4	4.0	163	1.8	3.2	---	e1.4
21	4.7	388	6.5	4.3	268	3.5	3.3	---	e1.6
22	5.2	361	5.7	3.8	308	3.3	3.5	191	1.8
23	4.2	---	e4.1	3.6	214	2.1	3.5	186	1.7
24	4.2	395	4.5	3.8	126	1.3	3.4	---	e1.8
25	3.9	434	4.6	3.8	132	1.3	3.5	---	e1.9
26	4.2	376	4.2	3.6	164	1.6	7.6	---	e11.0
27	4.1	342	3.8	4.0	---	e2.8	5.4	234	4.1
28	4.3	---	e3.9	4.2	318	3.7	4.6	---	e2.6
29	4.0	361	3.9	5.1	302	5.5	4.8	136	1.8
30	3.9	362	3.8	4.0	317	3.6	3.7	---	e1.1
31	3.7	314	3.2	3.4	239	2.2	---	---	---
TOTAL	311.9	---	5727.7	121.8	---	91.1	171.0	---	335.3

e Estimated.

07104050 NORTH ROCKRIMMON CREEK ABOVE DELMONICO DRIVE AT COLORADO SPRINGS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°54'56", long 104°49'35", in SW¹/₄NE¹/₄ sec.18, T.13 S., R.66 W., El Paso County, Hydrologic Unit 11020003, 300 ft upstream from Delmonico Drive at Colorado Springs (revised), 0.2 mi west of Interstate 25, 0.3 mi upstream from mouth, and 2.0 mi downstream from Woodmen Road. Elevation of site is 6,220 feet above sea level, from topographic map.

DRAINAGE AREA.--1.82 mi².

PERIOD OF RECORD.--Miscellaneous field and suspended-sediment discharge data may be available, August 1998 to current year (seasonal peaks only).

REMARKS.--Annual maximum discharge data are published in the "Maximum Discharge at Crest-Stage Partial-Record Stations" section of this report.

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
SEP 10...	1030	3.6	403	15.0	602	5.9

07104905 MONUMENT CREEK AT BIJOU STREET AT COLORADO SPRINGS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°50'14", long 104°49'44", in NW¹/₄NW¹/₄ sec.18, T.14 S., R.66 W., El Paso County, Hydrologic Unit 11020003, at bridge on Bijou Street at Colorado Springs, and 0.7 mi upstream from mouth (revised).

DRAINAGE AREA.--235 mi².

PERIOD OF RECORD.--December 1979 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	
OCT	30...	1330	23	9.1	8.5	785	13.0	94.3	17.3	1.00	180	.015	3.75	.12
DEC	11...	1250	17	11.2	8.4	790	2.0	93.2	18.4	1.10	180	.065	4.19	.14
MAR	05...	1340	47	10.9	8.3	687	3.5	87.6	15.2	.90	160	.071	4.24	.22
APR	16...	1430	18	7.6	8.4	706	20.5	73.2	14.4	1.20	170	E.012	2.72	.25
JUN	25...	1545	8.5	7.7	8.4	776	21.0	87.2	16.4	.99	160	E.012	2.48	.10
AUG	20...	1230	6.6	7.6	8.4	902	21.5	95.1	21.4	1.20	240	E.008	3.22	.04

Date	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	E COLI, MTEC MF (COL/100 ML) (31633)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	ARSENIC TOTAL (UG/L AS AS) (01002)	BORON, DIS-SOLVED (UG/L AS B) (01020)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	
OCT	30...	.21	<1.0	e28	46	1.3	2	80	90	<.10	.18	1.4	2	1.7
DEC	11...	.29	<1.0	e160	110	1.2	2	70	70	<.10	E.24	<1.0	2	2.3
MAR	05...	.99	E1.3	<3	e58	1.3	4	80	80	<.10	.53	E1.4	6	2.0
APR	16...	.37	<2.0	e23	e18	1.4	2	80	90	<.10	.27	<1.0	1	2.5
JUN	25...	.13	<2.0	320	600	1.6	2	E50	E50	<.10	E.12	E1.2	<1	1.8
AUG	20...	.07	<2.0	e200	420	1.7	2	90	80	<.10	<.10	2.7	2	E1.5

Date	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	CYANIDE TOTAL (MG/L AS CN) (00720)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	
OCT	30...	3.8	<.01	<10	1710	<.20	2	3.0	60	<.01	E.01	4.2	5	10
DEC	11...	6.3	<.01	<10	2520	<.20	4	E2.0	80	<.01	E.01	3.3	5	9
MAR	05...	17	<.01	<10	11500	<.20	20	E2.0	380	<.01	.03	4.6	12	11
APR	16...	5.2	<.01	10	1750	.24	3	<2	60	<.01	<.01	4.6	5	7
JUN	25...	2.8	--	<10	570	<.20	.86	E2.0	20	<.01	<.01	4.1	4	10
AUG	20...	2.9	--	<10	640	<.20	1	E2.0	20	<.01	<.01	5.1	4	15

e Estimated value.
 E Estimated laboratory analysis value.

07104905 MONUMENT CREEK AT BIJOU STREET AT COLORADO SPRINGS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
OCT 30...	8	<.04	<.04	3	20	92	5.7
DEC 11...	11	<.04	<.04	E3	E20	48	2.2
MAR 05...	11	.1	.09	E5	80	1320	167
APR 16...	9	<.04	<.04	<4	E20	125	6.1
JUN 25...	9	<.04	.04	<6	<9	67	1.5
AUG 20...	13	<.04	<.04	<6	<9	44	.78

e Estimated value.

E Estimated laboratory analysis value.

07105000 BEAR CREEK NEAR COLORADO SPRINGS, CO

LOCATION.--Lat 38°49'21", long 104°53'17", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.21, T.14 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on left bank 30 ft east of 26th Street, 0.6 mi southwest of Bear Creek Nature Center, 3.4 mi upstream from mouth, and 3.5 mi west of courthouse in Colorado Springs (revised).

DRAINAGE AREA.--6.89 mi².

PERIOD OF RECORD.--May 1992 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,520 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.62	0.70	0.97	0.87	0.80	e0.83	1.1	0.65	0.64	0.24	0.34	0.42
2	0.70	0.74	0.93	0.86	0.80	e0.83	1.1	0.69	0.55	0.34	0.34	0.39
3	0.72	0.76	0.92	0.92	0.77	e0.83	1.1	0.70	0.62	1.2	0.42	0.39
4	0.72	0.75	0.90	0.98	0.78	0.83	1.2	0.77	0.66	0.82	0.52	0.37
5	0.76	e0.81	0.90	0.98	0.79	0.80	1.1	0.80	0.67	0.63	0.50	0.36
6	0.78	0.83	0.87	0.98	0.81	0.82	1.2	0.79	0.59	0.68	0.44	0.36
7	0.75	0.80	0.93	0.98	0.81	0.75	1.2	0.73	0.56	0.59	0.44	0.34
8	0.71	0.77	0.93	0.98	0.80	0.70	1.2	0.76	0.59	0.51	0.43	0.34
9	0.72	0.78	0.93	0.98	0.76	e0.76	1.2	0.80	0.71	0.45	0.42	0.47
10	0.69	0.79	0.90	0.98	0.81	0.78	1.1	0.76	0.61	0.50	0.46	1.1
11	0.65	0.89	0.89	0.98	0.76	0.76	1.1	0.70	0.61	0.52	0.42	0.78
12	0.63	0.90	0.83	0.97	0.73	0.77	1.1	0.82	0.79	0.50	0.42	0.64
13	0.68	0.89	0.80	0.95	0.77	0.78	1.3	0.85	0.57	0.44	0.44	0.64
14	0.71	0.86	0.89	0.86	0.71	0.77	1.6	0.89	0.49	0.37	0.44	0.57
15	0.68	0.79	0.95	0.91	0.71	0.77	1.3	0.83	0.52	0.35	0.42	0.53
16	0.69	0.77	0.83	0.85	0.71	0.89	1.3	0.83	0.52	0.37	0.40	0.51
17	0.70	0.80	0.82	0.83	0.70	0.88	1.2	0.89	0.48	0.36	0.39	0.47
18	0.70	0.83	0.77	0.82	0.70	0.89	0.91	0.87	0.45	0.35	0.39	0.52
19	0.72	0.84	0.76	0.85	0.70	0.90	0.77	0.83	0.42	0.34	0.40	0.61
20	0.72	0.84	0.76	0.82	0.74	0.93	0.77	0.84	0.40	0.32	0.40	0.58
21	0.74	0.85	0.77	0.82	0.77	0.91	0.76	0.81	0.46	0.33	0.41	0.56
22	0.77	0.87	0.83	0.82	0.78	0.92	0.70	0.78	0.36	0.46	0.36	0.53
23	0.76	0.90	0.81	0.76	0.79	0.94	0.70	0.80	0.33	0.43	0.41	0.52
24	0.76	0.88	0.81	0.76	0.78	0.98	0.70	0.99	0.36	0.39	0.49	0.51
25	0.77	0.94	0.81	0.76	e0.83	0.86	0.70	0.87	0.34	0.41	0.46	0.49
26	0.77	0.91	0.81	0.75	e0.83	1.0	0.69	0.88	0.35	0.36	0.42	0.50
27	0.81	0.87	0.80	0.73	0.89	1.1	0.68	0.85	0.35	0.36	0.47	0.50
28	0.79	0.78	0.81	0.72	0.82	1.1	0.69	0.75	0.34	0.31	0.49	0.53
29	0.79	0.94	0.78	0.75	---	1.2	0.68	0.73	0.28	0.37	0.51	0.53
30	0.76	0.94	0.83	0.76	---	1.1	0.65	0.70	0.25	0.36	0.53	0.52
31	0.72	---	0.88	0.76	---	1.1	---	0.69	---	0.35	0.47	---
TOTAL	22.49	25.02	26.42	26.74	21.65	27.48	29.80	24.65	14.87	14.01	13.45	15.58
MEAN	0.725	0.834	0.852	0.863	0.773	0.886	0.993	0.795	0.496	0.452	0.434	0.519
MAX	0.81	0.94	0.97	0.98	0.89	1.2	1.6	0.99	0.79	1.2	0.53	1.1
MIN	0.62	0.70	0.76	0.72	0.70	0.70	0.65	0.65	0.25	0.24	0.34	0.34
AC-FT	45	50	52	53	43	55	59	49	29	28	27	31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2002, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	
MEAN	1.901	1.718	1.432	1.299	1.266	1.430	2.619	7.578	5.191	2.788	2.894	2.008
MAX	3.16	2.41	2.12	1.87	1.80	2.15	6.13	22.0	17.0	7.55	6.77	4.39
(WY)	2000	2000	2000	2000	2000	2000	1999	1999	1997	1995	1999	1997
MIN	0.37	0.14	0.17	0.30	0.36	0.52	0.31	0.80	0.47	0.30	0.43	0.30
(WY)	1993	1993	1993	1993	1993	1993	1993	2002	1993	1993	2002	1992

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1992 - 2002

ANNUAL TOTAL	426.93	262.16		
ANNUAL MEAN	1.170	0.718	2.982	
HIGHEST ANNUAL MEAN			5.30	1999
LOWEST ANNUAL MEAN			0.41	1993
HIGHEST DAILY MEAN	2.6	May 8	89	Apr 30 1999
LOWEST DAILY MEAN	0.54	Sep 27	0.02	Sep 18 1992
ANNUAL SEVEN-DAY MINIMUM	0.60	Sep 25	0.31	Jun 25 1992
MAXIMUM PEAK FLOW			1.8	Sep 9 1999
MAXIMUM PEAK STAGE			1.09	Sep 9 1999
ANNUAL RUNOFF (AC-FT)	847	520	2160	
10 PERCENT EXCEEDS	1.8	0.97	5.8	
50 PERCENT EXCEEDS	1.1	0.76	1.8	
90 PERCENT EXCEEDS	0.72	0.39	0.58	

e Estimated.

a From rating curve extended above 122 ft³/s.

b From floodmarks.

07105490 CHEYENNE CREEK AT EVANS AVENUE AT COLORADO SPRINGS, CO

LOCATION.--Lat 38°47'26", Long 104°51'49", in SW¹/₄NW¹/₄ sec.35, T.14 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on right bank 23 ft upstream from Evans Avenue at Colorado Springs (revised), 30 ft downstream from the confluence of North and South Cheyenne Creeks, and 3.1 mi upstream from the mouth.

DRAINAGE AREA.--21.7 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1992 to current year.

REVISED RECORDS.--WDR CO-93-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 6,280 ft above sea level, from topographic map. Prior to June 13, 2000, at datum 1.00 ft higher.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by several small reservoirs and diversions. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.55	1.0	0.64	1.0	0.95	0.88	0.54	0.65	0.37	0.38	0.37	0.37
2	0.56	0.84	0.64	1.0	0.95	0.88	0.54	0.62	0.36	15	0.34	0.38
3	0.55	0.72	0.61	1.0	0.95	0.90	0.64	0.60	0.33	6.4	0.36	0.43
4	0.54	0.69	0.59	1.0	0.98	0.95	0.84	0.54	0.32	1.5	0.37	0.43
5	0.54	0.69	0.56	1.0	1.0	0.95	0.88	0.69	0.32	1.1	0.36	0.42
6	0.54	0.69	0.54	1.0	1.0	0.95	0.88	0.56	0.31	1.3	0.36	0.41
7	0.52	0.81	0.54	1.0	1.0	0.94	0.92	0.48	0.31	0.51	0.52	0.40
8	0.52	0.90	0.54	1.0	1.0	0.87	0.95	0.51	0.31	0.48	0.48	0.42
9	0.54	0.95	0.54	1.0	1.0	0.87	0.78	0.46	0.30	0.58	0.48	0.50
10	0.54	0.97	0.54	1.0	0.98	0.92	0.64	0.44	0.30	0.49	0.40	0.60
11	0.54	0.92	0.59	1.0	0.95	0.77	0.67	0.43	0.31	0.37	0.38	0.63
12	0.64	0.92	0.65	1.0	0.95	0.63	0.75	0.49	0.31	0.36	0.38	0.96
13	0.59	0.95	0.74	1.0	0.95	0.87	0.91	0.46	0.30	0.33	0.38	1.2
14	0.59	0.93	0.82	1.0	0.95	0.91	0.95	0.51	0.33	0.31	0.37	0.84
15	0.62	0.75	0.82	1.0	0.95	0.88	0.95	0.53	0.38	0.33	0.37	0.48
16	0.69	0.78	0.82	1.0	0.95	0.85	0.92	0.43	0.38	0.33	0.39	0.49
17	0.69	0.75	0.82	1.0	0.95	0.80	0.84	0.41	0.38	0.30	0.38	0.49
18	0.64	0.73	0.82	1.0	0.95	0.70	0.74	0.42	0.38	0.30	0.36	0.50
19	0.59	0.69	0.84	1.0	0.95	0.59	0.79	0.41	0.38	0.29	0.36	0.50
20	0.69	0.69	0.88	1.0	0.95	0.55	1.1	0.41	0.38	0.28	0.36	0.46
21	0.75	0.69	0.88	1.0	0.95	0.54	1.1	0.41	0.42	0.31	0.41	0.45
22	0.79	0.69	0.88	1.0	1.0	0.54	1.1	0.39	0.39	0.39	0.40	0.48
23	0.82	0.69	0.88	1.0	1.1	0.54	0.96	0.40	0.37	0.38	0.44	0.49
24	0.84	0.69	0.88	1.0	1.0	0.57	0.82	0.47	0.37	0.38	0.42	0.47
25	0.91	0.69	0.94	1.0	0.95	0.72	0.79	0.44	0.38	0.37	0.39	0.44
26	1.1	0.64	0.95	1.0	0.94	0.69	0.70	0.41	0.49	0.37	0.37	0.42
27	1.4	0.64	0.95	0.98	0.96	0.54	0.65	0.41	0.45	0.37	0.42	0.42
28	1.6	0.64	0.95	0.95	0.89	0.54	0.71	0.38	0.37	0.39	0.45	0.44
29	1.5	0.64	0.97	0.95	---	0.54	0.60	0.38	0.37	0.42	0.41	0.45
30	0.80	0.64	1.0	0.95	---	0.54	0.63	0.36	0.78	0.41	0.40	0.45
31	0.83	---	1.0	0.95	---	0.54	---	0.36	---	0.42	0.37	---
TOTAL	23.02	23.02	23.82	30.78	27.10	22.96	24.29	14.46	11.15	35.15	12.25	15.42
MEAN	0.743	0.767	0.768	0.993	0.968	0.741	0.810	0.466	0.372	1.134	0.395	0.514
MAX	1.6	1.0	1.0	1.0	1.1	0.95	1.1	0.69	0.78	15	0.52	1.2
MIN	0.52	0.64	0.54	0.95	0.89	0.54	0.54	0.36	0.30	0.28	0.34	0.37
AC-FT	46	46	47	61	54	46	48	29	22	70	24	31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2002, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	
MEAN	3.925	3.409	2.651	2.507	2.346	2.738	9.387	33.42	25.41	8.096	11.85	4.700
MAX	7.31	5.56	5.15	4.54	5.20	7.34	25.5	86.4	93.1	30.5	39.7	11.2
(WY)	1997	1998	1998	1996	1998	1998	1999	1994	1995	1995	1999	1997
MIN	0.73	0.77	0.46	0.73	0.51	0.53	0.81	0.47	0.37	0.59	0.40	0.51
(WY)	1993	2002	1993	2001	2000	1993	2002	2002	2002	2001	2002	2002

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1992 - 2002

ANNUAL TOTAL	409.55	263.42		
ANNUAL MEAN	1.122	0.722	9.585	
HIGHEST ANNUAL MEAN			21.8	1995
LOWEST ANNUAL MEAN			0.72	2002
HIGHEST DAILY MEAN	8.4	May 14	453	Apr 30 1999
LOWEST DAILY MEAN	0.49	Mar 4	0.10	Apr 8 1993
ANNUAL SEVEN-DAY MINIMUM	0.49	Jul 18	0.23	Mar 6 1993
MAXIMUM PEAK FLOW			a595	Jun 10 1997
MAXIMUM PEAK STAGE			b3.51	Jun 10 1997
ANNUAL RUNOFF (AC-FT)	812	522	6940	
10 PERCENT EXCEEDS	1.8	1.0	23	
50 PERCENT EXCEEDS	0.78	0.64	3.3	
90 PERCENT EXCEEDS	0.54	0.37	0.58	

a From rating curve extended above 437 ft³/s.

b Datum then in use.

07105490 CHEYENNE CREEK AT EVANS AVENUE AT COLORADO SPRINGS, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April to September 2002 (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published during period of operation are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.02 inches, July 2, 2002.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation during period April to September, 1.02 inches, July 2.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
2	---	---	---	---	---	---	---	0.00	0.00	1.02	0.00	0.00
3	---	---	---	---	---	---	---	0.00	0.21	0.00	0.11	0.00
4	---	---	---	---	---	---	---	0.00	0.14	0.00	0.01	0.00
5	---	---	---	---	---	---	---	0.00	0.01	0.31	0.00	0.00
6	---	---	---	---	---	---	---	0.00	0.00	0.06	0.10	0.00
7	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
8	---	---	---	---	---	---	---	0.06	0.00	0.00	0.00	0.03
9	---	---	---	---	---	---	---	0.00	0.00	0.14	0.00	0.64
10	---	---	---	---	---	---	---	0.00	0.00	0.01	0.00	0.52
11	---	---	---	---	---	---	---	0.02	0.29	0.00	0.00	0.00
12	---	---	---	---	---	---	---	0.36	0.00	0.00	0.00	0.80
13	---	---	---	---	---	---	---	0.00	0.05	0.00	0.00	0.24
14	---	---	---	---	---	---	---	0.00	0.03	0.00	0.00	0.00
15	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
16	---	---	---	---	---	---	---	0.09	0.02	0.00	0.00	0.00
17	---	---	---	---	---	---	---	0.03	0.00	0.00	0.00	0.00
18	---	---	---	---	---	---	---	0.04	0.00	0.00	0.01	0.25
19	---	---	---	---	---	---	---	0.09	0.00	0.00	0.00	0.01
20	---	---	---	---	---	---	---	0.00	0.02	0.00	0.00	0.00
21	---	---	---	---	---	---	---	0.00	0.16	0.07	0.17	0.00
22	---	---	---	---	---	---	---	0.01	0.00	0.01	0.02	0.00
23	---	---	---	---	---	---	---	0.46	0.00	0.00	0.16	0.00
24	---	---	---	---	---	---	---	0.41	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	---	0.01	0.00	0.00	0.00	0.00
26	---	---	---	---	---	---	0.00	0.00	0.16	0.05	0.00	0.06
27	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.29	0.00
28	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.03	0.03
29	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.03	0.00
30	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
31	---	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	---	1.58	1.09	1.67	0.93	2.58
MAX	---	---	---	---	---	---	---	0.46	0.29	1.02	0.29	0.80

07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO

LOCATION.--Lat 38°48'59", long 104°49'20", in NE¹/₄SW¹/₄ sec.19, T.14 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on left bank 10 ft downstream from Cheyenne Creek (revised), 31 ft upstream from Nevada Avenue bridge at Colorado Springs, and 1.3 mi downstream from Monument Creek.

DRAINAGE AREA.--392 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1921 to September 1924, January 1976 to current year. Monthly discharge only for some periods, published in WSP 1311. Statistical summary computed for 1976 to current year.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 5,900 ft above sea level, from topographic map.

REMARKS.--Records poor. Natural flow of stream affected by storage reservoirs, power developments, transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	25	23	24	19	19	21	24	22	20	6.9	8.8
2	26	24	24	23	25	13	21	22	21	73	8.4	8.9
3	25	25	25	24	24	19	21	22	23	79	11	9.8
4	29	27	25	26	24	27	23	23	42	42	13	9.0
5	33	26	24	24	25	27	24	22	24	761	12	8.0
6	33	24	23	24	20	25	23	23	16	482	8.5	5.3
7	31	25	23	25	24	24	23	24	14	19	6.0	5.1
8	31	31	20	25	26	24	22	24	13	13	6.4	5.5
9	29	29	21	27	19	19	24	22	12	11	8.7	82
10	29	25	23	34	19	22	23	23	12	92	6.6	213
11	29	28	20	27	25	24	24	23	12	44	7.2	20
12	29	27	21	27	24	23	23	36	15	17	7.2	52
13	26	25	20	27	19	21	22	25	27	14	8.6	41
14	22	31	22	22	21	20	22	24	40	13	6.9	14
15	24	35	20	26	29	27	24	24	15	11	7.4	11
16	23	34	20	25	26	26	24	31	11	9.6	9.4	15
17	24	34	21	24	25	24	23	36	14	9.0	9.4	15
18	22	33	23	24	26	24	21	23	14	8.6	11	54
19	21	35	20	24	26	25	22	23	13	8.3	9.3	31
20	21	34	21	25	25	24	21	23	23	7.7	6.5	10
21	21	32	24	26	25	23	23	22	26	51	11	13
22	25	32	23	26	25	22	24	22	13	30	16	13
23	26	46	20	24	25	24	17	53	11	17	8.2	e13
24	22	34	19	20	24	29	13	224	17	16	e8.0	e13
25	23	32	20	26	25	64	13	46	13	14	9.2	14
26	26	36	23	26	19	47	15	e27	11	18	12	13
27	26	33	24	24	23	31	15	e22	24	8.1	e13	14
28	27	31	23	26	23	24	16	e24	25	6.7	e12	13
29	27	30	25	27	---	24	14	23	15	5.9	e12	13
30	25	27	23	22	---	23	18	23	16	6.5	e12	15
31	27	---	21	22	---	22	---	22	---	7.4	12	---
TOTAL	804	910	684	776	660	790	619	1005	554	1914.8	295.8	752.4
MEAN	25.94	30.33	22.06	25.03	23.57	25.48	20.63	32.42	18.47	61.77	9.542	25.08
MAX	33	46	25	34	29	64	24	224	42	761	16	213
MIN	21	24	19	20	19	13	13	22	11	5.9	6.0	5.1
AC-FT	1590	1800	1360	1540	1310	1570	1230	1990	1100	3800	587	1490

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2002, BY WATER YEAR (WY)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	46.87	41.28	33.30	30.77	28.84	39.91	90.81	197.5	128.1	79.36	87.85	47.44															
MAX	212	143	81.3	68.1	57.8	92.6	486	944	555	268	341	116															
(WY)	1985	1985	1985	2000	2000	1998	1999	1999	1997	1995	1999	1999															
MIN	10.6	11.4	11.8	5.12	6.27	11.4	14.8	23.5	16.3	12.9	9.54	7.98															
(WY)	1978	1979	1979	1979	1979	1976	1978	1976	1976	1976	2002	1978															

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1976 - 2002

ANNUAL TOTAL	19054	9765.0	
ANNUAL MEAN	52.20	26.75	72.91
HIGHEST ANNUAL MEAN			228
LOWEST ANNUAL MEAN			23.2
HIGHEST DAILY MEAN	724	Aug 31	761 Jul 5
LOWEST DAILY MEAN	12	Jul 6	5.1 Sep 7
ANNUAL SEVEN-DAY MINIMUM	18	Jul 2	7.1 Jul 27
MAXIMUM PEAK FLOW			4940 Jul 5
MAXIMUM PEAK STAGE			b7.84 Jul 5
ANNUAL RUNOFF (AC-FT)	37790	19370	52820
10 PERCENT EXCEEDS	82	32	150
50 PERCENT EXCEEDS	36	23	36
90 PERCENT EXCEEDS	22	9.7	15

e Estimated.
a From slope-area measurement of peak flow.
b From floodmark.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1975 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT: August 1995 to September 1997 (seasonal peaks only), April 1998 to current year (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

REMARKS.--Daily suspended-sediment records are poor.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 8,640 mg/L, Apr. 29, 1999; minimum daily mean, 12 mg/L, Sept. 8, 1998.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 275,000 tons (estimated), Apr. 30, 1999; minimum daily, 0.36 ton (estimated), Sept. 7, 2002.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 3,540 mg/L, May 24; minimum daily mean, 18 mg/L, Aug. 16.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 17,100 tons (estimated), July 5; minimum daily, 0.36 ton (estimated), Sept. 7.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	FLUO-RIDE, DIS-SOLVED (MG/L) (00950)	SULFATE DIS-SOLVED (MG/L) (00945)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L) (00671)
OCT	30...	29	9.6	8.4	799	10.0	92.7	20.1	1.50	170	.016	2.94	.08
DEC	11...	15	10.8	8.2	896	2.5	99.4	25.6	1.70	220	.052	3.81	.10
MAR	05...	26	10.9	8.2	760	4.5	89.6	20.2	1.40	190	.040	3.54	.16
APR	16...	24	8.6	8.3	777	17.0	74.3	17.5	1.70	200	E.011	2.48	.18
JUN	25...	11	7.9	8.1	875	20.0	84.1	19.3	1.20	210	E.011	2.40	.08
AUG	20...	1035	7.9	8.2	1040	23.0	104	27.7	1.30	300	E.009	3.23	.03

Date	PHOS-PHORUS TOTAL (MG/L) (AS P) (00665)	OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L) (00310)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)	ARSENIC DIS-SOLVED (UG/L) (AS AS) (01000)	ARSENIC TOTAL (UG/L) (AS AS) (01002)	BORON, DIS-SOLVED (UG/L) (AS B) (01020)	BORON, TOTAL RECOV-ERABLE (UG/L) (AS B) (01022)	CADMIUM DIS-SOLVED (UG/L) (AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L) (AS CD) (01027)	CHRO-MIUM, DIS-SOLVED (UG/L) (AS CR) (01030)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L) (AS CR) (01034)	COPPER, DIS-SOLVED (UG/L) (AS CU) (01040)	
OCT	30...	.15	1.1	220	260	1.8	2	--	90	<.10	.18	1.6	1	1.7
DEC	11...	.16	<1.0	e22	54	1.7	2	110	100	<.10	E.19	<1.0	E1	2.2
MAR	05...	.34	<1.0	<3	e18	1.6	3	100	100	<.10	E.22	E1.6	3	1.9
APR	16...	.28	<2.0	e12	e32	1.6	3	100	100	<.10	.28	<1.0	1	2.7
JUN	25...	.12	<2.0	640	640	2.0	2	70	70	<.10	E.18	E1.6	1	2.0
AUG	20...	.06	<2.0	440	440	2.2	2	120	120	<.10	E.18	2.8	2	E1.6

Date	COPPER, TOTAL RECOV-ERABLE (UG/L) (AS CU) (01042)	CYANIDE TOTAL (MG/L) (AS CN) (00720)	IRON, DIS-SOLVED (UG/L) (AS FE) (01046)	IRON, TOTAL RECOV-ERABLE (UG/L) (AS FE) (01045)	LEAD, DIS-SOLVED (UG/L) (AS PB) (01049)	LEAD, TOTAL RECOV-ERABLE (UG/L) (AS PB) (01051)	MANGA-NESE, DIS-SOLVED (UG/L) (AS MN) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L) (AS MN) (01055)	MERCURY DIS-SOLVED (UG/L) (AS HG) (71890)	MERCURY TOTAL RECOV-ERABLE (UG/L) (AS HG) (71900)	NICKEL, DIS-SOLVED (UG/L) (AS NI) (01065)	NICKEL, TOTAL RECOV-ERABLE (UG/L) (AS NI) (01067)	SELE-NIUM, DIS-SOLVED (UG/L) (AS SE) (01145)	
OCT	30...	3.6	<.01	<10	1460	<.20	3	40	90	<.01	<.01	4.0	5	9
DEC	11...	3.7	<.01	<10	900	<.20	2	60	100	<.01	<.01	3.3	4	8
MAR	05...	5.9	<.01	<10	2740	<.20	6	20	120	<.01	.01	4.8	5	9
APR	16...	5.3	<.01	20	1510	.22	3	20	70	<.01	<.01	4.7	6	7
JUN	25...	6.4	--	<10	700	<.20	1	10	40	<.01	E.01	4.2	5	10
AUG	20...	2.3	--	<10	340	<.20	1	20	50	<.01	<.01	5.7	5	14

e Estimated value.

E Estimated laboratory analysis value.

07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	SELENIUM, TOTAL (UG/L AS SE) (01147)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
OCT 30...	8	<.04	<.04	5	20	88	6.9
DEC 11...	10	<.04	<.04	E10	E20	57	2.3
MAR 05...	9	<.04	.04	E7	30	251	17.6
APR 16...	9	<.04	<.04	<4	E20	101	6.5
JUN 25...	8	<.04	<.04	<6	E10	37	1.1
AUG 20...	13	<.04	<.04	E10	E20	26	.55

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER, WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SULFATE SOLVED (MG/L AS SO4) (00945)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	ORTHO-PHOSPHATE, DIS-SOLVED (MG/L AS P) (00671)
MAY 24...	1030	124	8.9	7.9	432	9.0	44.0	8.59	.65	84.0	.278	1.31	.07
SEP 10...	1215	271	7.9	8.2	304	16.0	32.2	6.34	.45	52.0	.071	.93	.04

Date	Time	PHOSPHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L) (00310)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	ARSENIC DIS-SOLVED (AS AS) (01000)	ARSENIC TOTAL (AS AS) (01002)	BORON, SOLVED (AS B) (01020)	BORON, TOTAL RECOVERABLE (AS B) (01022)	CADMIUM, DIS-SOLVED (AS CD) (01025)	CADMIUM, TOTAL UNFLTRD (AS CD) (01027)	CHROMIUM, DIS-SOLVED (AS CR) (01030)	CHROMIUM, TOTAL RECOVERABLE (AS CR) (01034)	COPPER, DIS-SOLVED (AS CU) (01040)
MAY 24...	.57	--	1000	1400	1.7	2	E10	<10	<.10	<.10	E2.7	E2	E2.0	
SEP 10...	.99	6.0	e4000	9800	1.5	8	E40	40	--	1.5	E1.2	9	3.1	

Date	Time	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	CYANIDE TOTAL (MG/L AS CN) (00720)	IRON, DIS-SOLVED (AS FE) (01046)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, DIS-SOLVED (AS PB) (01049)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, DIS-SOLVED (AS MN) (01056)	MANGANESE, TOTAL RECOVERABLE (AS MN) (01055)	MERCURY, DIS-SOLVED (AS HG) (71890)	MERCURY, TOTAL RECOVERABLE (AS HG) (71900)	NICKEL, DIS-SOLVED (AS NI) (01065)	NICKEL, TOTAL RECOVERABLE (AS NI) (01067)	SELENIUM, DIS-SOLVED (AS SE) (01145)
MAY 24...	E2.0	<.01	20	9490	<.20	<.20	E10	E370	<.01	.04	2.7	3	E4	
SEP 10...	20	--	20	16200	E.31	49.4	8	780	<.01	.07	6.9	16	E3	

Date	Time	SELENIUM, TOTAL (UG/L AS SE) (01147)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	2,6-DIETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACE-NAPHTHENE TOTAL (UG/L) (34205)	ACE-NAPHTHENE TOTAL (UG/L) (34200)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (AS NI) (34253)	ANTHRACENE, TOTAL (UG/L) (34220)
MAY 24...	E4	<.04	<.04	E4	E80	E.01	<.006	E.02	<2	.020	.035	<.005	E.03
SEP 10...	6	<.04	.18	<6	240	E.6	<.006	E.03	<2	<.006	<.004	<.005	E.1

e Estimated value.
E Estimated laboratory analysis value.

ARKANSAS RIVER BASIN

07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO--Continued

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BENZENE NITRO-WATER UNFLTRD RECOVER (UG/L) (34447)	BENZO-A-PYRENE TOTAL (UG/L) (34247)	BENZO B FLUOR-AN-THENE TOTAL (UG/L) (34230)	BENZO K FLUOR-AN-THENE TOTAL (UG/L) (34242)	BENZO-[A]-ANTHRA-CENE WAT UNF (UG/L) (34526)	BENZO-[GHI]-PERY-LENE TOTAL (UG/L) (34521)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CHRY-SENE TOTAL (UG/L) (34320)
MAY 24...	.423	<.010	<2	E.1	E.2	<2	E.1	E.1	<.002	E.315	<.020	<.005	E.1
SEP 10...	.012	<.010	<2	E.5	E.9	E.3	E.5	E.9	<.002	E.218	<.020	<.005	E.7
Date	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL-ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FLUOR-ANTHENE TOTAL (UG/L) (34376)	FLUOR-ENE TOTAL (UG/L) (34381)	FONOFOS WATER DISS REC (UG/L) (04095)	INDENO (1,2,3-CD) PYRENE TOTAL (UG/L) (34403)
MAY 24...	<.018	E.003	E.040	.107	<.005	<.02	.013	<.009	<.005	E.3	E.01	<.003	E.04
SEP 10...	<.018	<.003	<.006	.036	<.005	<.02	<.002	<.009	<.005	E1	E.04	<.003	E.4
Date	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL-AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL-PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	
MAY 24...	<.004	<.035	.027	<.050	<.006	.041	<.006	<.002	<.007	<.003	<.010	<.004	E.020
SEP 10...	<.004	<.035	E.038	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.010	<.010	<.022
Date	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHENAN-THRENE TOTAL (UG/L) (34461)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	
MAY 24...	<.006	E.1	<.011	.02	<.004	<.010	<.011	<.02	E.3	<.008	<.02	<.034	<.02
SEP 10...	<.006	E.5	<.011	.06	<.040	<.010	<.011	<.02	E1	<.005	<.02	<.034	<.02
Date	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (MG/L) (80155)								
MAY 24...	<.005	<.002	E.001	<2	1390	465							
SEP 10...	<.005	<.002	<.009	E.04	2830	2070							

E Estimated laboratory analysis value.

07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO--Continued

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT						
01...	1130	23	860	16.5	86	5.3
24...	1330	22	842	11.5	52	3.1
30...	1145	29	799	10.0	88	6.9
NOV						
07...	1320	25	860	14.0	37	2.5
07...	1350	25	860	14.0	--	--
26...	1355	33	842	4.0	--	--
DEC						
11...	1115	15	896	2.5	57	2.3
13...	1345	18	902	2.0	--	--
JAN						
03...	1300	23	1030	1.5	--	--
22...	1255	28	707	3.5	296	22.4
FEB						
07...	1320	22	816	5.0	--	--
MAR						
05...	1230	26	760	4.5	251	17.6
APR						
01...	1230	21	869	17.0	88	5.0
16...	1310	24	777	17.0	101	6.5
MAY						
14...	1300	24	840	12.5	100	6.5
24...	1030	124	432	9.0	1390	465
JUN						
17...	1300	16	860	26.5	119	5.1
25...	1400	11	875	20.0	37	1.1
JUL						
06...	1500	154	327	24.0	1040	432
AUG						
20...	1035	7.9	1040	23.0	26	.55
SEP						
06...	1245	5.8	1020	25.0	--	--
10...	1215	271	304	16.0	2830	2070
10...	1415	203	322	17.0	810	444

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER									
1	22	86	5.3	25	---	---	23	---	---
2	26	---	e7.3	24	---	---	24	---	---
3	25	---	e6.8	25	---	---	25	---	---
4	29	---	e9.9	27	---	---	25	---	---
5	33	---	e19	26	---	---	24	---	---
6	33	---	e18	24	---	---	23	---	---
7	31	---	e13	25	---	---	23	---	---
8	31	---	e11	31	---	---	20	---	---
9	29	---	e9.1	29	---	---	21	---	---
10	29	122	9.4	25	---	---	23	---	---
11	29	---	e13.0	28	---	---	20	---	---
12	29	199	15	27	---	---	21	---	---
13	26	---	e9.6	25	---	---	20	---	---
14	22	87	5.4	31	---	---	22	---	---
15	24	125	8.1	35	---	---	20	---	---
16	23	188	12.0	34	---	---	20	---	---
17	24	259	17.0	34	---	---	21	---	---
18	22	---	e11.0	33	---	---	23	---	---
19	21	107	6.1	35	---	---	20	---	---
20	21	125	7.2	34	---	---	21	---	---
21	21	135	7.8	32	---	---	24	---	---
22	25	246	17.0	32	---	---	23	---	---
23	26	---	e17	46	---	---	20	---	---
24	22	63	3.7	34	---	---	19	---	---
25	23	62	3.8	32	---	---	20	---	---
26	26	57	3.9	36	---	---	23	---	---
27	26	141	9.9	33	---	---	24	---	---
28	27	---	e12	31	---	---	23	---	---
29	27	103	7.7	30	---	---	25	---	---
30	25	90	6.2	27	---	---	23	---	---
31	27	95	7.0	---	---	---	21	---	---
TOTAL	804	---	309.2	910	---	---	684	---	---

e Estimated.

ARKANSAS RIVER BASIN

07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT
	DISCHARGE (CFS)	CONCENTRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	DISCHARGE (TONS/DAY)
	JANUARY			FEBRUARY			MARCH		
1	24	---	---	19	---	---	19	---	---
2	23	---	---	25	---	---	13	---	---
3	24	---	---	24	---	---	19	---	---
4	26	---	---	24	---	---	27	---	---
5	24	---	---	25	---	---	27	---	---
6	24	---	---	20	---	---	25	---	---
7	25	---	---	24	---	---	24	---	---
8	25	---	---	26	---	---	24	---	---
9	27	---	---	19	---	---	19	---	---
10	34	---	---	19	---	---	22	---	---
11	27	---	---	25	---	---	24	---	---
12	27	---	---	24	---	---	23	---	---
13	27	---	---	19	---	---	21	---	---
14	22	---	---	21	---	---	20	---	---
15	26	---	---	29	---	---	27	---	---
16	25	---	---	26	---	---	26	---	---
17	24	---	---	25	---	---	24	---	---
18	24	---	---	26	---	---	24	---	---
19	24	---	---	26	---	---	25	---	---
20	25	---	---	25	---	---	24	---	---
21	26	---	---	25	---	---	23	---	---
22	26	---	---	25	---	---	22	---	---
23	24	---	---	25	---	---	24	---	---
24	20	---	---	24	---	---	29	---	---
25	26	---	---	25	---	---	64	---	---
26	26	---	---	19	---	---	47	---	---
27	24	---	---	23	---	---	31	---	---
28	26	---	---	23	---	---	24	---	---
29	27	---	---	---	---	---	24	---	---
30	22	---	---	---	---	---	23	---	---
31	22	---	---	---	---	---	22	---	---
TOTAL	776	---	---	660	---	---	790	---	---

DAY	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT
	DISCHARGE (CFS)	CONCENTRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	DISCHARGE (TONS/DAY)
	APRIL			MAY			JUNE		
1	21	88	4.9	24	168	11.0	22	---	e15.0
2	21	83	4.8	22	111	6.8	21	257	14.0
3	21	---	e5.0	22	---	e5.9	23	370	27.0
4	23	96	6.1	23	---	e6.6	42	1010	121
5	24	97	6.4	22	---	e7.2	24	477	35.0
6	23	81	5.2	23	---	e8.0	16	---	e6.7
7	23	76	4.7	24	---	e8.9	14	---	e3.8
8	22	---	e5.1	24	---	e9.5	13	---	e3.0
9	24	---	e6.2	22	153	9.4	12	---	e2.2
10	23	108	6.9	23	113	7.1	12	---	e1.5
11	24	120	7.9	23	---	e6.6	12	---	e0.93
12	23	97	6.2	36	412	48.0	15	129	19.0
13	22	---	e5.2	25	---	e15.0	27	417	75.0
14	22	102	6.2	24	99	6.4	40	---	e266
15	24	118	7.7	24	58	3.8	15	---	e7.9
16	24	107	6.9	31	342	60.0	11	---	e2.9
17	23	134	8.4	36	990	131	14	104	3.8
18	21	164	9.2	23	---	e33.0	14	---	e4.2
19	22	157	9.3	23	---	e31.0	13	---	e3.8
20	21	191	11.0	23	---	e28.0	23	---	e36.0
21	23	249	15.0	22	383	23.0	26	759	64.0
22	24	302	20.0	22	---	e15.0	13	247	10.0
23	17	---	e9.9	53	459	481	11	---	e2.4
24	13	117	4.2	224	3540	3230	17	446	65.0
25	13	128	4.6	46	---	e55.0	13	287	13.0
26	15	152	6.0	e27	---	e18.0	11	---	e1.1
27	15	---	e5.3	e22	---	e15.0	24	---	e2.4
28	16	---	e4.5	e24	---	e16.0	25	---	e2.4
29	14	---	e3.5	23	---	e16.0	15	---	e1.4
30	18	109	5.9	23	---	e16.0	16	---	e1.5
31	---	---	---	22	---	e15.0	---	---	---
TOTAL	619	---	212.2	1005	---	4343.2	554	---	811.93

e Estimated.

07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	20	---	e1.9	6.9	53	0.97	8.8	---	e1.4
2	73	257	432	8.4	30	0.72	8.9	---	e1.4
3	79	---	e133	11	---	e5.7	9.8	59	1.6
4	42	---	e63.0	13	---	e3.1	9.0	---	e1.5
5	761	---	e17100	12	75	2.7	8.0	63	1.4
6	482	1650	3490	8.5	46	1.0	5.3	46	0.66
7	19	---	e11.0	6.0	60	0.96	5.1	---	e0.36
8	13	---	e4.0	6.4	---	e1.0	5.5	42	0.65
9	11	---	e3.3	8.7	97	2.4	82	579	341
10	92	925	530	6.6	59	1.0	213	1460	1190
11	44	---	e115	7.2	48	0.94	20	88	5.3
12	17	---	e18.0	7.2	36	0.71	52	473	150
13	14	---	e7.4	8.6	---	e0.91	41	579	88.0
14	13	---	e2.9	6.9	44	0.82	14	106	4.0
15	11	---	e2.3	7.4	35	0.70	11	---	e2.4
16	9.6	---	e2.1	9.4	18	0.43	15	58	2.4
17	9.0	---	e1.9	9.4	---	e0.81	15	---	e1.9
18	8.6	---	e1.8	11	---	e1.6	54	427	222
19	8.3	---	e1.7	9.3	49	1.3	31	342	61.0
20	7.7	---	e1.6	6.5	28	0.48	10	---	e2.7
21	51	---	e160	11	146	16.0	13	---	e3.2
22	30	132	15.0	16	---	e9.8	13	---	e3.2
23	17	---	e3.9	8.2	---	e2.5	e13	---	e2.0
24	16	---	e3.9	e8.0	---	e61.0	e13	---	e4.2
25	14	---	e3.6	9.2	---	e1.5	14	---	e3.0
26	18	184	25.0	12	---	e1.9	13	---	e2.7
27	8.1	65	1.5	e13	---	e5.5	14	---	e2.6
28	6.7	54	0.97	e12	---	e5.6	13	---	e2.3
29	5.9	---	e0.89	e12	---	e1.0	13	---	e2.2
30	6.5	64	1.1	e12	---	e3.8	15	---	e2.3
31	7.4	84	1.9	12	59	1.8	---	---	---
TOTAL	1914.8	---	22140.66	295.8	---	138.65	752.4	---	2107.37

e Estimated.

07105530 FOUNTAIN CREEK BELOW JANITELL ROAD BELOW COLORADO SPRINGS, CO

LOCATION (REVISED).--Lat 38°48'11", long 104°47'43", in NE¹/₄SE¹/₄ sec.29, T.14 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on left bank at downstream side of bridge on Janitell Road, 0.1 mi downstream from Spring Creek, and 2.4 mi southeast of courthouse in Colorado Springs.

DRAINAGE AREA.--413 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1989 to current year.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 5,840 ft above sea level, from topographic map. Prior to July 10, 1990, at site 500 ft upstream at datum 2.00 ft higher. July 10, 1990 to May 27, 1999, on right bank at upstream side of bridge on Janitell Road at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, power developments, ground-water withdrawals, transbasin and transmountain diversions, diversions for irrigation and municipal use, return flows from irrigated areas, and flows from sewage-treatment plants.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e72	73	87	57	47	96	96	72	79	68	65	58
2	76	72	91	54	54	91	95	75	84	71	70	61
3	71	73	81	49	53	103	97	74	87	82	72	64
4	76	79	62	50	52	113	97	74	135	71	77	59
5	80	73	51	48	53	116	90	74	94	662	77	60
6	84	70	46	50	50	108	89	68	64	387	72	57
7	82	74	53	51	57	103	88	68	60	118	67	60
8	83	94	51	51	58	96	87	73	61	97	68	62
9	78	88	55	52	53	101	90	71	58	72	72	114
10	80	81	58	65	58	108	79	66	55	140	70	270
11	79	85	55	50	63	104	70	66	60	86	69	78
12	75	85	53	53	61	103	66	106	78	65	71	124
13	74	82	50	52	63	98	70	79	108	74	72	83
14	73	84	61	46	64	100	73	67	129	73	66	54
15	72	85	65	48	78	116	70	70	97	76	65	51
16	72	85	65	43	72	117	69	75	88	76	64	50
17	71	87	68	44	72	111	72	116	84	77	60	48
18	68	87	69	43	72	110	69	75	74	82	61	85
19	67	90	63	49	69	110	68	80	69	79	61	64
20	69	90	72	50	67	106	74	77	77	76	60	46
21	72	93	77	56	82	103	73	68	78	145	71	50
22	72	93	86	44	106	103	75	64	75	106	71	49
23	75	120	76	35	104	106	72	88	73	85	67	45
24	70	101	74	35	103	119	73	292	66	80	77	46
25	69	98	59	44	104	177	75	108	63	78	67	46
26	73	94	65	49	97	146	74	93	59	100	67	58
27	74	83	65	46	102	115	73	91	66	81	70	53
28	76	74	60	44	104	103	74	73	67	73	66	49
29	73	76	61	52	---	101	73	71	66	71	66	47
30	70	90	55	49	---	103	66	73	64	64	72	45
31	72	---	52	49	---	101	---	74	---	68	65	---
TOTAL	2298	2559	1986	1508	2018	3387	2337	2621	2318	3483	2118	2036
MEAN	74.13	85.30	64.06	48.65	72.07	109.3	77.90	84.55	77.27	112.4	68.32	67.87
MAX	84	120	91	65	106	177	97	292	135	662	77	270
MIN	67	70	46	35	47	91	66	64	55	64	60	45
AC-FT	4560	5080	3940	2990	4000	6720	4640	5200	4600	6910	4200	4040

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2002, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	105.9	99.60	79.72	82.62	94.47	107.7	172.1	284.4	228.6	146.7	166.7	112.1	
MAX	179	150	140	122	139	161	658	1022	693	319	467	200	
(WY)	2000	2000	1998	1998	2000	1998	1999	1999	1997	1995	1999	1999	
MIN	47.3	48.6	39.5	46.2	56.4	76.4	78.0	78.6	69.4	70.1	68.4	59.7	
(WY)	1993	1990	1990	1990	1990	1991	2002	1993	1990	1993	2002	1992	

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1990 - 2002

ANNUAL TOTAL	39933	28669		
ANNUAL MEAN	109.4	78.55	144.9	
HIGHEST ANNUAL MEAN			312	1999
LOWEST ANNUAL MEAN			76.0	1993
HIGHEST DAILY MEAN	1030	Aug 31	10300	Apr 30 1999
LOWEST DAILY MEAN	43	Jun 16	31	Dec 14 1992
ANNUAL SEVEN-DAY MINIMUM	53	Dec 5	42	Jan 22 1989
MAXIMUM PEAK FLOW			5570	Apr 30 1999
MAXIMUM PEAK STAGE			7.01	Jul 5 1999
ANNUAL RUNOFF (AC-FT)	79210	56860	105000	
10 PERCENT EXCEEDS	149	104	228	
50 PERCENT EXCEEDS	94	72	98	
90 PERCENT EXCEEDS	65	51	56	

e Estimated.
a From rating curve extended above 13,200 ft³/s.
b Maximum gage height, 11.11 ft, Sep 2, 1994.

07105530 FOUNTAIN CREEK BELOW JANITELL ROAD BELOW COLORADO SPRINGS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1975 to June 1976, May to September 1979, December 1979 to current year.

PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: October 1990 to January 1998.
 pH: October 1990 to January 1998.
 SPECIFIC CONDUCTANCE: October 1990 to January 1998.
 WATER TEMPERATURE: October 1990 to January 1998.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SULFATE, DIS-SOLVED (MG/L AS SO4) (00945)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	ORTHO-PHOSPHATE, DIS-SOLVED (MG/L AS P) (00671)
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OCT	30...	1030	101	8.4	8.0	723	16.5	58.0	18.0	1.50	160	.033	3.09	.66
DEC	11...	0955	81	8.8	8.0	756	12.5	50.8	19.0	1.60	170	.053	3.56	.12
MAR	05...	1100	137	8.9	7.8	739	12.5	52.9	17.9	1.80	170	.057	2.85	.06
APR	16...	1110	96	10.0	7.9	720	16.5	45.3	15.6	1.50	170	.021	2.58	.09
JUN	25...	1220	76	7.8	7.8	708	21.0	43.0	13.7	1.60	140	.036	2.78	.07
AUG	20...	1630	66	7.1	7.9	751	23.5	45.7	18.9	1.40	160	.039	5.41	1.21

Date	PHOSPHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L) (00310)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	COLIFORM, FECAL, UM-MF (COLS./100 ML) (31625)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	ARSENIC TOTAL (UG/L AS AS) (01002)	BORON, DIS-SOLVED (UG/L AS B) (01020)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	CADMIUM, DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHROMIUM, DIS-SOLVED (UG/L AS CR) (01030)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
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OCT	30...	.84	4.1	e100	180	1.9	2	270	260	<.10	.10	1.5	1	3.7
DEC	11...	.34	3.7	170	210	1.6	2	280	250	E.10	E.11	<1.0	E1	3.0
MAR	05...	.39	4.9	e20	310	1.0	2	270	260	E.10	E.10	E1.6	2	4.7
APR	16...	.28	3.0	96	170	1.1	1	230	260	<.10	.23	<1.0	<1	6.0
JUN	25...	.19	2.0	200	540	2.6	3	230	230	E.16	E.16	E1.6	E1	5.5
AUG	20...	1.30	<2.0	460	500	3.5	3	230	220	--	<.10	2.0	1	1.9

Date	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	CYANIDE TOTAL (MG/L AS CN) (00720)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY, DIS-SOLVED (UG/L AS HG) (71890)	MERCURY, TOTAL RECOVERABLE (UG/L AS HG) (71900)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)
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OCT	30...	5.4	<.01	40	460	.37	2	40	60	<.01	<.01	5.2	6	6
DEC	11...	5.3	<.01	40	450	E.36	2	40	60	<.01	E.01	3.1	4	5
MAR	05...	7.3	<.01	40	730	.44	4	50	70	<.01	.01	4.8	4	5
APR	16...	7.4	<.01	40	390	.62	1	40	50	<.01	<.01	4.2	4	5
JUN	25...	7.6	--	30	690	.76	2	30	60	<.01	E.01	3.4	4	5
AUG	20...	2.3	--	30	150	.48	.78	40	40	<.01	<.01	4.2	4	6

e Estimated value.
 E Estimated laboratory analysis value.

ARKANSAS RIVER BASIN

07105530 FOUNTAIN CREEK BELOW JANITELL ROAD BELOW COLORADO SPRINGS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
OCT 30...	5	<.04	.15	40	50	26	7.2
DEC 11...	6	<.04	.15	40	50	27	6.0
MAR 05...	6	<.04	.22	50	60	80	29.5
APR 16...	6	<.04	.19	40	50	27	7.0
JUN 25...	4	<.04	.16	50	60	56	11.4
AUG 20...	5	<.04	.04	40	40	6.1	1.1

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT 01...	1050	101	814	20.0	JAN 03...	1140	67	900	11.0
24...	1255	89	722	17.0	FEB 07...	1220	60	770	12.0
NOV 07...	1240	90	778	16.5	APR 04...	1425	96	763	15.5
26...	1155	101	724	12.5	SEP 06...	1230	72	698	24.5
DEC 13...	1240	72	766	11.5					

07105530 FOUNTAIN CREEK BELOW JANITELL ROAD, BELOW COLORADO SPRINGS CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 2001 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published during period of operation are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.84 inches, July 5, 2002.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.84 inches, July 5.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.11	---	---	---	---	---	0.01	0.00	0.00	0.00	0.00	0.00
2	0.00	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00	0.00
3	0.00	---	---	---	---	---	0.00	0.00	0.02	0.00	0.03	0.00
4	0.00	---	---	---	---	---	0.00	0.00	0.08	0.00	0.00	0.00
5	0.00	---	---	---	---	---	0.00	0.00	0.00	1.84	0.00	0.00
6	0.00	---	---	---	---	---	0.00	0.00	0.00	0.27	0.00	0.00
7	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00	0.01
9	0.00	---	---	---	---	---	0.00	0.01	0.00	0.11	0.00	0.34
10	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.48
11	0.00	---	---	---	---	---	0.00	0.02	0.11	0.00	0.00	0.02
12	0.00	---	---	---	---	---	0.00	0.27	0.00	0.00	0.00	0.62
13	0.00	---	---	---	---	---	0.00	0.00	0.01	0.00	0.00	0.06
14	0.00	---	---	---	---	---	0.00	0.00	0.08	0.00	0.00	0.00
15	0.00	---	---	---	---	---	0.00	0.00	0.01	0.00	0.00	0.00
16	0.00	---	---	---	---	---	0.05	0.11	0.03	0.00	0.00	0.00
17	0.00	---	---	---	---	---	0.00	0.04	0.00	0.00	0.00	0.00
18	0.00	---	---	---	---	---	0.00	0.03	0.00	0.00	0.06	0.22
19	0.00	---	---	---	---	---	0.00	0.17	0.00	0.00	0.00	0.00
20	0.00	---	---	---	---	---	0.02	0.00	0.00	0.00	0.00	0.00
21	0.00	---	---	---	---	---	0.01	0.01	0.00	0.06	0.14	0.00
22	0.00	---	---	---	---	---	0.00	0.00	0.00	0.01	0.00	0.00
23	0.00	---	---	---	---	---	0.00	0.43	0.00	0.00	0.09	0.00
24	0.00	---	---	---	---	---	0.00	0.38	0.00	0.00	0.00	0.00
25	0.00	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00	0.00
26	0.00	---	---	---	---	---	0.01	0.00	0.00	0.02	0.00	0.11
27	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.17	0.00
28	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.01	0.01
29	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	0.11	---	---	---	---	---	0.10	1.50	0.34	2.31	0.50	1.87
MAX	0.11	---	---	---	---	---	0.05	0.43	0.11	1.84	0.17	0.62

07105800 FOUNTAIN CREEK AT SECURITY, CO

LOCATION.--Lat 38°43'46", long 104°44'00", in NE¹/₄SW¹/₄ sec.24, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on left bank on upstream side of Carson Road Bridge at Security (revised), 0.9 mi southwest of South Security School, 3.5 mi northeast of Fountain, and 5.5 mi upstream from Jimmy Camp Creek.

DRAINAGE AREA.--495 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to current year.

REVISED RECORDS.--WDR CO-85-1: 1984 (M).

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 5,640 ft above sea level, from topographic map. Prior to July 19, 1972, and from Feb. 21, 1980 to June 30, 1986, at datum 7.00 ft higher. July 19, 1972 to Feb. 20, 1980, at site on right bank 900 ft downstream at datum 1.00 ft higher. July 1, 1986 to Feb. 6, 1995, at datum 4.00 ft higher. Feb. 7, 1995 to Nov. 29, 1995, at datum 3.00 ft higher. Nov. 30, 1995 to Apr. 4, 2001, at datum 2.00 ft higher.

REMARKS.--No estimated daily discharges. Records fair except for May 24 and July 5-6, which are poor. Natural flow of stream affected by storage reservoirs, power developments, transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage treatment plants.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	121	118	77	71	106	96	82	90	83	81	78
2	96	123	121	74	79	102	96	87	88	78	86	79
3	95	119	108	77	78	111	99	87	82	83	86	81
4	100	124	90	81	75	124	109	86	126	71	93	77
5	105	120	77	79	75	125	115	84	94	610	92	84
6	108	117	68	81	70	121	116	78	67	792	90	83
7	107	120	70	83	73	118	113	80	71	109	86	85
8	108	149	65	83	76	116	113	85	74	93	85	85
9	101	128	68	85	69	113	113	87	70	81	86	118
10	103	117	72	99	70	115	105	84	69	137	83	361
11	102	118	71	83	77	110	102	84	78	82	80	104
12	96	119	70	87	77	110	94	132	86	53	83	187
13	94	110	73	85	75	104	90	84	74	60	83	100
14	89	106	81	76	96	102	89	81	137	62	76	57
15	83	111	76	84	127	114	86	84	93	67	75	54
16	82	117	76	77	120	116	82	82	83	71	74	53
17	82	120	80	78	118	111	86	122	104	74	69	51
18	79	117	79	74	114	109	82	79	94	82	71	67
19	78	122	74	80	109	106	83	87	91	85	71	95
20	81	124	81	83	106	101	91	84	101	82	71	62
21	83	127	83	89	109	98	88	90	97	154	92	63
22	94	125	87	83	111	97	93	91	96	104	83	66
23	106	145	78	72	113	100	87	94	94	90	124	67
24	108	131	78	68	111	111	85	505	86	87	94	69
25	114	130	70	80	112	176	87	140	91	86	77	70
26	123	129	77	82	107	146	87	118	86	94	77	79
27	124	127	80	78	115	117	88	117	96	107	85	73
28	125	114	77	77	116	102	87	97	96	84	82	73
29	127	111	77	78	---	97	85	87	93	86	81	68
30	125	124	73	73	---	97	78	89	83	83	88	65
31	127	---	73	72	---	97	---	88	---	85	82	---
TOTAL	3135	3665	2471	2478	2649	3472	2825	3275	2690	3915	2586	2654
MEAN	101.1	122.2	79.71	79.94	94.61	112.0	94.17	105.6	89.67	126.3	83.42	88.47
MAX	127	149	121	99	127	176	116	505	137	792	124	361
MIN	78	106	65	68	69	97	78	78	67	53	69	51
AC-FT	6220	7270	4900	4920	5250	6890	5600	6500	5340	7770	5130	5260

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2002, BY WATER YEAR (WY)

	83.90	75.95	65.06	69.26	76.31	87.60	124.2	213.9	188.2	123.9	136.1	87.69
MEAN	83.90	75.95	65.06	69.26	76.31	87.60	124.2	213.9	188.2	123.9	136.1	87.69
MAX	317	198	168	146	156	195	738	1131	886	381	561	231
(WY)	1985	2000	2000	1998	2000	2000	1999	1999	1997	1995	1999	1999
MIN	12.6	15.1	17.8	11.9	14.1	21.3	23.7	24.7	17.8	30.1	23.5	13.1
(WY)	1965	1965	1976	1976	1972	1965	1978	1966	1968	1972	1974	1968

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1965 - 2002

ANNUAL TOTAL	50819	35815		
ANNUAL MEAN	139.2	98.12	111.2	
HIGHEST ANNUAL MEAN			355	1999
LOWEST ANNUAL MEAN			31.5	1968
HIGHEST DAILY MEAN	1380	Aug 31	792	Jul 6
LOWEST DAILY MEAN	65	Dec 8	51	Sep 17
ANNUAL SEVEN-DAY MINIMUM	69	Dec 6	63	Sep 14
MAXIMUM PEAK FLOW			6120	Jul 5
MAXIMUM PEAK STAGE			b6.85	Jul 5
ANNUAL RUNOFF (AC-FT)	100800	71040	80550	
10 PERCENT EXCEEDS	182	122	199	
50 PERCENT EXCEEDS	123	87	78	
90 PERCENT EXCEEDS	80	71	24	

a From slope-area measurement of peak flow. Flood of May 30, 1935, may have been larger.
b From floodmarks.
c From floodmarks, site and datum then in use.

07105800 FOUNTAIN CREEK AT SECURITY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1984 to current year.

PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: October 1990 to January 1998.
 pH: October 1990 to January 1998.
 SPECIFIC CONDUCTANCE: October 1990 to January 1998.
 WATER TEMPERATURE: October 1990 to January 1998.
 SUSPENDED SEDIMENT: April 1998 to current year (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

REMARKS.--Daily suspended-sediment records are fair.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 7,410 mg/L, June 24, 1999; minimum daily mean, 21 mg/L, May 15, 2002.
 SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 400,000 tons (estimated), Apr. 30, 1999; minimum daily, 4.9 tons, May 15, 2002.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 5,500 mg/L, July 6; minimum daily mean, 21 mg/L, May 15.
 SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 29,000 tons, July 5; minimum daily, 4.9 tons, May 15.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	CALCIUM SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
OCT	30...	86	855	8.3	11.5	8.7	1.8	210	120	73.6	22.3	190	1.30
DEC	10...	100	853	8.4	10.0	8.7	6.3	88	e170	63.8	21.3	190	1.40
MAR	05...	74	823	8.3	7.0	10.5	5.9	200	e10	71.8	21.7	200	1.50
APR	16...	64	843	8.5	12.0	10.1	2.0	e34	e38	58.7	18.6	200	1.40
JUN	25...	67	816	8.3	21.0	7.7	2.0	510	400	59.5	18.1	160	1.50
AUG	20...	84	788	8.4	27.5	6.6	<2.0	4200	3900	48.3	17.9	170	1.30

Date	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS P) (00608)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM WATER UNFLTRD (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
OCT	4.75	.084	1.27	1.17	3	2.3	230	240	.14	<.10	2	1.3	5.3
DEC	4.26	.583	.70	.45	3	2.4	240	260	E.23	E.10	2	<1.0	8.5
MAR	4.25	.273	.51	.22	2	1.5	220	220	<.10	E.13	2	E1.5	7.4
APR	3.42	.160	.41	.33	2	1.5	220	210	.17	<.10	<1	<1.0	7.2
JUN	3.42	.206	.44	.34	3	2.7	200	200	.20	E.16	1	E1.3	7.7
AUG	3.13	.200	.76	.66	4	4.0	240	250	<.10	.11	2	2.1	5.4

Date	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)
OCT	3.3	440	20	1	.40	40	10	<.01	<.01	6	5.9	6	7
DEC	3.6	1400	--	3	.42	80	20	E.01	<.01	5	3.6	8	6
MAR	4.3	970	20	2	E.35	70	30	.02	<.01	5	5.8	8	8
APR	6.2	370	20	1	.52	50	30	<.01	<.01	5	5.7	7	6
JUN	4.7	1270	20	2	.60	50	E9	E.01	<.01	6	5.3	6	6
AUG	3.4	1000	<10	2	.45	60	E4	E.01	<.01	6	5.4	--	--

e Estimated value.
 E Estimated laboratory analysis value.

ARKANSAS RIVER BASIN

07105800 FOUNTAIN CREEK AT SECURITY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CYANIDE TOTAL (MG/L AS CN) (00720)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
OCT 30...	.07	<.04	40	30	<.01	27	6.3
DEC 10...	.13	<.04	40	30	<.01	104	28.1
MAR 05...	.14	<.04	40	30	<.01	65	13.1
APR 16...	.10	<.04	E30	30	<.01	18	3.1
JUN 25...	.07	<.04	40	40	--	60	10.9
AUG 20...	.09	<.04	40	30	--	68	15.4

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHELD FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)
MAY 24...	0910	275	9.1	7.9	447	10.5	36.1	9.14	.58	95.0	.315	1.60	.09
SEP 10...	1500	433	7.6	7.9	409	7.5	35.0	E9.51	.59	76.0	.051	1.46	.11

Date	Time	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	E COLI, MTEC MF (COL/ 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	ARSENIC TOTAL (UG/L AS AS) (01002)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)
MAY 24...	1.48	--	2300	1800	1.9	2	E30	E40	<.10	<.10	E2.4	E2	E2.1	
SEP 10...	1.31	7.0	e560	27000	2.2	12	90	90	E.20	1.9	<1.0	12	2.6	

Date	Time	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	CYANIDE TOTAL (MG/L AS CN) (00720)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)
MAY 24...	E2.0	<.01	30	27200	E.34	.35	E14	E980	<.01	.08	3.2	3	E4	
SEP 10...	30	--	40	790	.39	53.5	4	990	<.01	.07	7.3	21.2	3	

Date	Time	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	1,2,5,6 -DIBENZ -ANTHRA- -CENE (UG/L) (34556)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACE- NAPHTH- ENE TOTAL (UG/L) (34205)	ACE- NAPHTH- YLENE TOTAL (UG/L) (34200)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ANTHRA- CENE TOTAL (UG/L) (34220)
MAY 24...	E4	<.04	<.04	E8	E210	E.02	<.006	E.03	<2	.021	.037	<.005	E.05	
SEP 10...	7	<.04	.28	E10	270	E.6	<.006	E.09	<2	<.006	<.004	<.005	E.3	

e Estimated value.
E Estimated laboratory analysis value.

07105800 FOUNTAIN CREEK AT SECURITY, CO--Continued

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BENZENE NITRO-WATER UNFLTRD RECOVER (UG/L) (34447)	BENZO-A-PYRENE TOTAL (UG/L) (34247)	BENZO B FLUOR-AN-THENE TOTAL (UG/L) (34230)	BENZO K FLUOR-AN-THENE TOTAL (UG/L) (34242)	BENZO-[A]-ANTHRA-CENE WAT UNF (UG/L) (34526)	BENZO-[GHI]-PERY-LENE TOTAL (UG/L) (34521)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CHRY-SENE TOTAL (UG/L) (34320)
MAY 24...	.521	<.010	<2	E.2	E.3	<2	E.2	E.1	<.002	E.432	<.020	<.005	E.2
SEP 10...	.010	<.010	<2	E.7	E.9	E.4	E.6	E.9	<.002	E.182	<.020	<.005	E.8
Date	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL-ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FLUOR-ANTHENE TOTAL (UG/L) (34376)	FLUOR-ENE TOTAL (UG/L) (34381)	FONOFOS WATER DISS REC (UG/L) (04095)	INDENO (1,2,3-CD) PYRENE TOTAL (UG/L) (34403)
MAY 24...	<.018	.003	E.051	.097	<.005	<.02	<.002	<.009	<.005	E.6	E.04	<.003	E.08
SEP 10...	<.018	<.003	<.006	.039	<.005	<.02	<.002	<.009	<.005	E2	E.1	<.003	E.4
Date	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL-AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL-PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	
MAY 24...	<.004	<.035	.037	<.050	<.006	.038	<.006	<.002	<.007	<.003	<.010	<.004	E.020
SEP 10...	<.015	<.035	E.017	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.010	<.020	<.022
Date	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHENAN-THRENE TOTAL (UG/L) (34461)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, PYRENE DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	
MAY 24...	<.006	E.3	<.011	.02	<.004	<.010	<.011	<.02	E.5	<.010	<.02	<.034	<.02
SEP 10...	<.006	E1	<.011	.05	<.030	<.010	<.011	<.02	E2	<.005	<.02	<.034	<.02
Date	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	SEDI-MENT, DIS-CHARGE, SUS-PENDEDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDEDED (MG/L) (80155)								
MAY 24...	<.005	<.002	<.009	<2	2030	1510							
SEP 10...	<.005	<.002	<.009	E.05	1570	1840							

E Estimated laboratory analysis value.

ARKANSAS RIVER BASIN

07105800 FOUNTAIN CREEK AT SECURITY, CO--Continued

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT						
01...	1345	112	829	22.0	78	23.6
24...	1100	88	900	11.0	34	8.1
30...	0900	86	855	11.5	27	6.3
NOV						
07...	1115	93	888	14.5	33	8.3
07...	1140	101	888	14.5	--	--
26...	1045	88	856	6.5	--	--
DEC						
10...	1430	100	853	10.0	104	28.1
13...	1125	45	895	5.5	--	--
27...	1235	60	937	6.5	--	--
JAN						
22...	1205	67	960	7.5	51	9.2
FEB						
07...	1430	92	870	11.0	--	--
MAR						
05...	0945	74	823	7.0	65	13.1
APR						
04...	1245	144	802	15.0	--	--
04...	1300	141	802	15.0	128	48.7
16...	0935	64	843	12.0	18	3.1
MAY						
14...	1100	64	913	12.0	24	4.1
24...	0910	275	447	10.5	2030	1510
JUN						
17...	1530	118	766	25.0	147	46.8
25...	1000	67	816	21.0	60	10.9
JUL						
06...	1615	368	406	24.0	1250	1240
AUG						
20...	1500	84	788	27.5	68	15.4
SEP						
06...	1200	65	853	23.5	--	--
10...	1115	611	450	17.0	2030	3350
10...	1500	433	409	7.5	1570	1840

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	90	77	19.0	121	---	---	118	---	---
2	96	80	21.0	123	---	---	121	---	---
3	95	86	22.0	119	---	---	108	---	---
4	100	90	24.0	124	---	---	90	---	---
5	105	---	e23	120	---	---	77	---	---
6	108	66	19.0	117	---	---	68	---	---
7	107	75	22.0	120	---	---	70	---	---
8	108	100	29.0	149	---	---	65	---	---
9	101	98	27.0	128	---	---	68	---	---
10	103	---	e23	117	---	---	72	---	---
11	102	81	22.0	118	---	---	71	---	---
12	96	106	27.0	119	---	---	70	---	---
13	94	93	23.0	110	---	---	73	---	---
14	89	76	18.0	106	---	---	81	---	---
15	83	---	e13	111	---	---	76	---	---
16	82	54	12.0	117	---	---	76	---	---
17	82	70	16.0	120	---	---	80	---	---
18	79	65	14.0	117	---	---	79	---	---
19	78	53	11.0	122	---	---	74	---	---
20	81	---	e10	124	---	---	81	---	---
21	83	52	12.0	127	---	---	83	---	---
22	94	75	19.0	125	---	---	87	---	---
23	106	72	21.0	145	---	---	78	---	---
24	108	40	12.0	131	---	---	78	---	---
25	114	---	e11	130	---	---	70	---	---
26	123	38	12.0	129	---	---	77	---	---
27	124	49	17.0	127	---	---	80	---	---
28	125	74	25.0	114	---	---	77	---	---
29	127	65	22.0	111	---	---	77	---	---
30	125	34	11.0	124	---	---	73	---	---
31	127	44	15.0	---	---	---	73	---	---
TOTAL	3135	---	572.0	3665	---	---	2471	---	---

e Estimated.

07105800 FOUNTAIN CREEK AT SECURITY, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	JANUARY			FEBRUARY			MARCH		
1	77	---	---	71	---	---	106	---	---
2	74	---	---	79	---	---	102	---	---
3	77	---	---	78	---	---	111	---	---
4	81	---	---	75	---	---	124	---	---
5	79	---	---	75	---	---	125	---	---
6	81	---	---	70	---	---	121	---	---
7	83	---	---	73	---	---	118	---	---
8	83	---	---	76	---	---	116	---	---
9	85	---	---	69	---	---	113	---	---
10	99	---	---	70	---	---	115	---	---
11	83	---	---	77	---	---	110	---	---
12	87	---	---	77	---	---	110	---	---
13	85	---	---	75	---	---	104	---	---
14	76	---	---	96	---	---	102	---	---
15	84	---	---	127	---	---	114	---	---
16	77	---	---	120	---	---	116	---	---
17	78	---	---	118	---	---	111	---	---
18	74	---	---	114	---	---	109	---	---
19	80	---	---	109	---	---	106	---	---
20	83	---	---	106	---	---	101	---	---
21	89	---	---	109	---	---	98	---	---
22	83	---	---	111	---	---	97	---	---
23	72	---	---	113	---	---	100	---	---
24	68	---	---	111	---	---	111	---	---
25	80	---	---	112	---	---	176	---	---
26	82	---	---	107	---	---	146	---	---
27	78	---	---	115	---	---	117	---	---
28	77	---	---	116	---	---	102	---	---
29	78	---	---	---	---	---	97	---	---
30	73	---	---	---	---	---	97	---	---
31	72	---	---	---	---	---	97	---	---
TOTAL	2478	---	---	2649	---	---	3472	---	---

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	APRIL			MAY			JUNE		
1	96	121	31.0	82	---	e28.0	90	89	21.0
2	96	88	23.0	87	---	e30.0	88	---	e17.0
3	99	---	e23.0	87	---	e31.0	82	192	44.0
4	109	106	31.0	86	---	e31.0	126	420	143
5	115	74	23.0	84	---	e30.0	94	256	68.0
6	116	70	22.0	78	---	e28.0	67	107	19.0
7	113	74	23.0	80	136	29.0	71	---	e14.0
8	113	---	e19.0	85	---	e31.0	74	93	19.0
9	113	47	14.0	87	---	e33.0	70	124	23.0
10	105	49	14.0	84	---	e31.0	69	102	19.0
11	102	76	21.0	84	---	e32.0	78	99	21.0
12	94	---	e20.0	132	597	277	86	898	409
13	90	---	e19.0	84	---	e72.0	74	446	124
14	89	---	e18.0	81	118	25.0	137	1240	1270
15	86	---	e17.0	84	21	4.9	93	---	e299
16	82	51	11.0	82	---	e5.6	83	481	105
17	86	88	21.0	122	1660	568	104	179	49.0
18	82	---	e24.0	79	---	e332	94	74	19.0
19	83	---	e25.0	87	1060	239	91	---	11.0
20	91	---	e28.0	84	---	e109	101	---	e12.0
21	88	---	e27.0	90	305	74.0	97	---	e13.0
22	93	---	e29.0	91	---	e74.0	96	---	e13.0
23	87	---	e28.0	94	---	e83.0	94	---	e14.0
24	85	---	e27.0	505	2340	4500	86	---	e13.0
25	87	---	e28.0	140	228	88.0	91	60	15.0
26	87	---	e29.0	118	157	50.0	86	---	e14.0
27	88	---	e29.0	117	110	34.0	96	---	e16.0
28	87	---	e29.0	97	---	e26.0	96	---	e16.0
29	85	---	e29.0	87	111	26.0	93	---	e16.0
30	78	---	e27.0	89	---	e28.0	83	---	e14.0
31	---	---	---	88	115	28.0	---	---	---
TOTAL	2825	---	709.0	3275	---	6977.5	2690	---	2850.0

e Estimated.

ARKANSAS RIVER BASIN

07105800 FOUNTAIN CREEK AT SECURITY, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT
	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)
	JULY			AUGUST			SEPTEMBER		
1	83	---	e14.0	81	---	e36.0	78	91	19.0
2	78	---	e13.0	86	---	e38.0	79	121	25.0
3	83	---	e14.0	86	---	e37.0	81	90	19.0
4	71	---	e12.0	93	---	e40.0	77	---	e17.0
5	610	2260	29000	92	---	e40.0	84	77	17.0
6	792	5500	17000	90	153	37.0	83	79	18.0
7	109	---	e193	86	112	26.0	85	---	e16.0
8	93	---	e136	85	91	21.0	85	---	e11.0
9	81	---	e134	86	83	19.0	118	309	174
10	137	704	515	83	---	e17.0	361	1370	1560
11	82	692	203	80	---	e14.0	104	177	51.0
12	53	117	16.0	83	60	13.0	187	1010	1590
13	60	---	e12.0	83	---	e15.0	100	648	250
14	62	---	e12.0	76	---	e17.0	57	129	20.0
15	67	---	e13.0	75	95	19.0	54	86	12.0
16	71	---	e14.0	74	---	e20.0	53	64	9.1
17	74	---	e15.0	69	---	e19.0	51	---	e6.4
18	82	---	e16.0	71	---	e19.0	67	119	58.0
19	85	---	e17.0	71	99	19.0	95	274	152
20	82	---	e16.0	71	77	15.0	62	73	12.0
21	154	1140	1470	92	377	148	63	62	11.0
22	104	---	e90.0	83	---	e102	66	---	e10.0
23	90	---	e47.0	124	1000	1030	67	55	9.9
24	87	---	e44.0	94	698	227	69	---	e11.0
25	86	---	e42.0	77	---	e38.0	70	68	13.0
26	94	---	e136	77	---	e34.0	79	109	24.0
27	107	---	e157	85	---	e34.0	73	---	e24.0
28	84	---	e39.0	82	---	e30.0	73	---	e20.0
29	86	---	e39.0	81	---	e27.0	68	---	e14.0
30	83	---	e37.0	88	109	26.0	65	55	9.6
31	85	---	e38.0	82	---	e19.0	---	---	---
TOTAL	3915	---	49504.0	2586	---	2196.0	2654	---	4183.0

e Estimated.

07105900 JIMMY CAMP CREEK AT FOUNTAIN, CO

LOCATION.--Lat 38°41'04", long 104°41'17", in NW¼SE¼ sec.5, T.16 S., R.65 W., El Paso County, Hydrologic Unit 11020003, on right bank 110 ft downstream of bridge on county road, 0.2 mi east of Fountain, and 1.5 mi upstream from mouth.

DRAINAGE AREA.--65.6 mi².

PERIOD OF RECORD.--January 1976 to current year.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 5,530 ft above sea level, from topographic map. Prior to Aug. 14, 1991, at site 110 ft upstream on downstream side of bridge; Jan. 1976 to Sept. 3, 1986, at datum 4.0 ft higher and Sept. 4, 1986 to Aug. 13, 1991, at present datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, ground-water withdrawals, diversions for irrigation, and return flows from irrigated areas. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 17, 1965, reached an estimated discharge of 124,000 ft³/s, gage height, unknown.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	1.8	1.9	2.0	1.7	1.7	3.8	2.1	1.4	0.73	0.30	0.35
2	1.8	1.8	2.0	2.0	1.7	e1.7	1.8	2.3	1.3	0.73	0.32	0.32
3	1.8	1.8	2.0	1.9	1.7	e1.6	1.8	2.3	1.2	0.77	0.33	0.35
4	1.7	1.8	2.0	1.9	1.7	1.6	1.8	2.2	1.4	0.79	0.32	0.35
5	1.8	1.9	2.0	1.9	1.7	1.7	1.9	2.3	1.6	1.8	0.31	0.34
6	1.8	2.0	2.0	1.9	1.7	1.8	2.0	2.2	1.4	2.8	0.29	0.32
7	1.7	1.9	2.0	1.9	1.7	1.8	1.9	2.3	1.2	1.1	0.29	0.32
8	1.7	e1.9	2.0	1.9	1.7	1.6	1.9	2.2	1.1	1.0	0.29	0.32
9	1.7	e1.9	2.0	1.9	1.6	e1.7	2.0	2.1	1.0	1.1	0.32	0.37
10	1.7	e1.9	2.0	1.9	1.6	1.7	1.9	2.1	1.0	0.99	0.31	0.84
11	1.7	e1.8	2.0	1.9	1.5	1.7	1.9	2.2	1.1	0.87	0.28	0.92
12	1.7	e1.8	2.0	1.9	1.5	1.7	1.9	2.5	1.1	0.82	0.26	0.95
13	1.7	1.8	2.0	1.9	1.5	1.7	1.8	2.3	1.2	0.75	0.27	1.0
14	1.7	1.8	2.0	1.9	1.5	1.7	1.8	2.2	1.3	0.70	0.28	0.92
15	1.7	1.9	2.0	1.9	1.5	1.7	1.7	2.3	1.2	0.71	0.25	0.86
16	1.7	1.8	2.0	1.8	1.5	1.7	1.6	2.4	1.2	0.65	0.24	0.83
17	1.8	1.9	2.0	1.8	1.6	1.7	1.6	2.4	1.2	0.55	0.23	0.70
18	1.8	1.8	2.0	1.8	1.6	1.7	1.6	2.4	1.1	0.46	0.24	0.69
19	1.8	1.8	2.1	e1.7	1.6	1.7	1.7	2.3	1.1	0.39	0.26	0.77
20	1.8	1.8	2.1	1.7	1.6	1.7	1.7	2.3	1.2	0.41	0.27	0.83
21	1.9	1.8	2.1	1.7	1.6	1.6	1.7	2.2	1.2	0.40	0.28	0.73
22	1.9	1.8	2.1	1.7	1.6	1.7	1.7	2.1	1.00	0.47	0.32	0.70
23	1.8	1.9	2.1	1.7	1.6	1.7	1.7	2.2	0.90	0.66	0.42	0.70
24	1.8	1.8	2.0	1.7	1.6	1.7	1.7	2.5	0.84	0.66	0.44	0.69
25	1.8	1.9	2.0	1.7	1.6	1.7	1.7	2.3	0.88	0.46	0.46	0.67
26	1.9	1.8	2.0	1.7	e1.6	1.7	1.8	2.2	0.88	0.46	0.45	0.71
27	2.0	1.8	2.0	1.7	1.5	1.7	1.7	2.0	0.77	0.44	0.49	0.73
28	2.0	1.8	2.0	1.7	1.6	1.7	1.9	1.9	0.70	0.36	0.54	0.71
29	2.0	1.8	2.0	1.7	---	1.7	2.0	1.7	0.75	0.34	0.48	0.68
30	1.9	1.9	2.0	1.7	---	1.8	2.1	1.6	0.65	0.31	0.44	0.67
31	1.8	---	2.0	1.7	---	1.8	---	1.5	---	0.30	0.39	---
TOTAL	55.7	55.2	62.4	56.2	44.9	52.7	56.1	67.6	32.87	22.98	10.37	19.34
MEAN	1.797	1.840	2.013	1.813	1.604	1.700	1.870	2.181	1.096	0.741	0.335	0.645
MAX	2.0	2.0	2.1	2.0	1.7	1.8	3.8	2.5	1.6	2.8	0.54	1.0
MIN	1.7	1.8	1.9	1.7	1.5	1.6	1.6	1.5	0.65	0.30	0.23	0.32
AC-FT	110	109	124	111	89	105	111	134	65	46	21	38

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2002, BY WATER YEAR (WY)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	
MEAN	2.088	2.254	1.812	1.700	1.630	1.745	2.059	2.626	3.560	3.620	4.487	1.800																
MAX	3.55	6.49	3.17	2.74	2.39	3.54	9.33	10.1	27.8	27.9	13.4	5.12																
(WY)	1985	1982	1995	1986	1977	1980	1999	1995	1995	1985	1984	1994																
MIN	1.20	1.58	0.87	1.01	0.79	1.05	0.56	0.91	0.98	0.74	0.34	0.64																
(WY)	1979	1984	1988	1988	1990	1990	1990	1986	1989	2002	2002	2002																

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1976 - 2002

ANNUAL TOTAL	773.28	536.36																										
ANNUAL MEAN	2.119	1.469																										
HIGHEST ANNUAL MEAN																												
LOWEST ANNUAL MEAN																												
HIGHEST DAILY MEAN				19	Jun	8		3.8	Apr	1		700	Jul	28	1985													
LOWEST DAILY MEAN				0.92	Jul	7		0.23	Aug	17		a0.00	Apr	12	1990													
ANNUAL SEVEN-DAY MINIMUM				1.00	Jul	2		0.25	Aug	12		0.07	Apr	10	1990													
MAXIMUM PEAK FLOW								34	Apr	1		b4810	Jun	3	1994													
MAXIMUM PEAK STAGE								c4.76	Apr	1		c9.51	Jun	3	1994													
ANNUAL RUNOFF (AC-FT)	1530	1060										1770																
10 PERCENT EXCEEDS				2.7				2.0				2.9																
50 PERCENT EXCEEDS				2.0				1.7				1.8																
90 PERCENT EXCEEDS				1.6				0.39				0.96																

e Estimated.

a Also occurred Apr 13, 15, 1990.

b From contracted-opening measurement of peak flow.

c From floodmarks.

07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO

LOCATION.--Lat 38°36'06", long 104°40'11", in SW¹/₄NE¹/₄ sec.4, T.17 S., R.65 W., El Paso County, Hydrologic Unit 11020003, on right bank 50 ft upstream from Old Pueblo Road bridge, 100 ft downstream from Denver & Rio Grande Railroad bridge, 0.9 mi downstream from Little Fountain Creek, and 5.6 mi south of Fountain.

DRAINAGE AREA.--681 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to February 1940 (monthly records only), March 1940 to September 1954; July 1985 to current year.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 5,355 ft above sea level, from topographic map. Sept. 18, 1938 to Mar. 1, 1940, nonrecording gage at site 50 ft downstream at different datum. Mar. 2, 1940 to Sept. 30, 1954, at site 200 ft upstream at different datum. July 2, 1985 to Sept. 2, 1987, at site 500 ft upstream at different datum. Sept. 3, 1987 to Mar. 12, 1990, at site 1,100 ft upstream at different datum.

REMARKS.--No estimated daily discharges. Records fair. Natural flow of stream affected by storage reservoirs, power developments, ground-water withdrawals, transmountain diversions, diversions for irrigation and municipal use, return flows from irrigated areas, and flows from sewage-treatment plants.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 14.4 ft, at different datum, May 30, 1935, discharge undetermined. Floods of May 1935 and June 1965 probably exceeded flood of May 1940.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	199	168	106	94	126	97	70	109	60	87	75
2	108	198	170	107	104	138	73	77	106	80	82	78
3	92	181	168	101	98	125	78	90	111	102	78	91
4	97	183	129	117	99	147	84	84	160	90	88	84
5	106	178	120	108	94	149	84	71	138	198	92	85
6	109	163	102	110	100	147	84	64	84	829	98	82
7	107	157	104	121	111	133	88	62	81	127	92	78
8	108	210	100	123	118	138	99	59	77	102	91	87
9	102	165	100	118	102	128	87	67	71	67	94	103
10	94	145	111	130	88	142	75	67	72	136	87	411
11	86	151	111	131	122	150	67	64	74	172	85	70
12	92	158	106	119	121	138	76	116	170	71	91	224
13	99	147	105	117	110	137	60	108	152	70	100	165
14	84	141	121	117	125	131	60	60	124	74	94	47
15	81	137	124	127	172	142	59	59	243	78	89	41
16	82	144	126	111	175	161	48	57	89	87	85	51
17	73	140	132	108	162	155	50	124	89	113	78	65
18	71	143	129	110	158	149	59	57	77	108	78	61
19	75	156	120	117	156	141	63	66	72	101	82	133
20	68	168	126	127	146	129	67	83	78	92	82	58
21	81	171	123	116	137	124	59	75	76	178	101	64
22	97	171	128	114	142	122	65	92	90	173	118	73
23	140	184	129	90	126	129	66	91	80	92	65	72
24	128	172	114	77	115	129	67	712	70	90	233	57
25	122	158	101	91	113	209	68	197	70	93	74	60
26	140	171	102	115	93	157	70	114	57	93	68	73
27	134	176	111	108	112	146	69	93	57	151	61	74
28	130	155	106	104	131	114	69	76	62	95	66	70
29	171	151	107	95	---	111	71	81	62	94	80	69
30	196	181	101	97	---	115	66	89	58	85	89	72
31	196	---	103	97	---	119	---	106	---	94	79	---
TOTAL	3364	4954	3697	3429	3424	4281	2128	3231	2859	3995	2787	2773
MEAN	108.5	165.1	119.3	110.6	122.3	138.1	70.93	104.2	95.30	128.9	89.90	92.43
MAX	196	210	170	131	175	209	99	712	243	829	233	411
MIN	68	137	100	77	88	111	48	57	57	60	61	41
AC-FT	6670	9830	7330	6800	6790	8490	4220	6410	5670	7920	5530	5500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2002, BY WATER YEAR (WY)

	73.08	89.32	74.59	75.75	79.59	89.66	131.1	233.9	176.7	116.3	145.4	72.99
MEAN	73.08	89.32	74.59	75.75	79.59	89.66	131.1	233.9	176.7	116.3	145.4	72.99
MAX	266	253	231	214	201	224	787	1602	1080	432	713	242
(WY)	2000	2000	2000	2000	2000	2000	1999	1999	1997	1995	1999	1999
MIN	3.70	10.0	5.14	6.99	6.07	6.39	4.30	9.78	4.50	3.47	3.15	1.31
(WY)	1954	1940	1953	1952	1941	1941	1954	1950	1953	1952	1954	1939

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1939 - 2002
ANNUAL TOTAL	58501	40922	
ANNUAL MEAN	160.3	112.1	113.1
HIGHEST ANNUAL MEAN			430
LOWEST ANNUAL MEAN			10.3
HIGHEST DAILY MEAN	1080	829	13200
LOWEST DAILY MEAN	49	41	a.00
ANNUAL SEVEN-DAY MINIMUM	72	57	0.27
MAXIMUM PEAK FLOW		3830	b22100
MAXIMUM PEAK STAGE		6.81	c9.19
ANNUAL RUNOFF (AC-FT)	116000	81170	81900
10 PERCENT EXCEEDS	207	165	227
50 PERCENT EXCEEDS	147	102	68
90 PERCENT EXCEEDS	87	66	7.5

a Also occurred Sep 30, 1939.
b From contracted-opening and slope-area measurement of peak flow.
c Site and datum then in use; maximum gage height, 12.06 ft, Apr 30, 1999.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1987 to current year.

PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: November 1987 to current year.
 pH: November 1987 to current year.
 SPECIFIC CONDUCTANCE: November 1987 to current year.
 WATER TEMPERATURE: November 1987 to current year.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry.

REMARKS.-- Daily dissolved-oxygen records are poor. Daily pH records are fair. Daily specific-conductance records are fair except for Feb. 27 to Apr. 3 and Aug. 12-30, which are poor. Daily water-temperature records are good except for Jan. 17 to Feb. 8, Apr. 18 to May 2, May 10 to June 6, and Aug. 16 to Sept. 30, which are poor. Daily data that are not published are either missing or of unacceptable quality. Reported values are representative of the stream during steady flows based on cross-section comparisons made during the year at flows between 42-90 ft³/s. Daily mean pH records are available from the district office.

EXTREMES FOR PERIOD OF RECORD.--

DISSOLVED OXYGEN: Maximum, 12.9 mg/L, Mar. 15, 2000; minimum, 3.7 mg/L, July 9, 1993.
 pH: Maximum, 8.7 units, Dec. 9-10, 1999; minimum, 6.5 units, Oct. 26, 28-29, 31, 1995.
 SPECIFIC CONDUCTANCE: Maximum, 1,660 microsiemens/cm, Aug. 27-28, 1996; minimum, 141 microsiemens/cm, Aug. 8, 1991.
 WATER TEMPERATURE: Maximum, 31.8°C, July 9, 1990; minimum, 0.0°C, on many days.

EXTREMES FOR CURRENT YEAR.--

DISSOLVED OXYGEN: Maximum, 12.8 mg/L, Nov. 28; minimum, 4.4 mg/L, Aug. 23-24.
 pH: Maximum, 8.6 units, Aug. 23; minimum, 7.7 units, Aug. 21-22.
 SPECIFIC CONDUCTANCE: Maximum, 1,260 microsiemens/cm, Oct. 21-22; minimum, 362 microsiemens/cm, July. 6.
 WATER TEMPERATURE: Maximum, 30.3° C, July 18; minimum, 0.0° C, on many days.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	
OCT	29...	1215	108	8.4	8.3	1050	15.5	90.7	28.9	1.50	290	<.075	4.18	.88
DEC	10...	1245	90	9.1	8.3	1040	8.5	83.0	29.1	1.40	280	.105	4.83	.42
MAR	04...	1300	99	9.1	8.2	961	10.5	80.3	27.1	1.40	240	.023	4.22	.19
APR	15...	1400	43	6.7	8.2	1090	21.5	82.8	27.7	1.60	300	.022	3.38	.34
JUN	24...	1440	45	6.3	8.2	1060	23.5	80.8	26.2	1.60	320	E.014	3.54	.29
AUG	19...	1020	73	7.1	8.2	995	20.5	72.0	24.6	1.40	270	.202	4.16	.73

Date	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	E COLI, MTEC MF WATER (COLS./100 ML) (31633)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	ARSENIC TOTAL (UG/L AS AS) (01002)	BORON, DIS-SOLVED (UG/L AS B) (01020)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	
OCT	29...	.50	1.1	e12	60	2.5	3	240	240	.14	.14	1.9	3	3.5
DEC	10...	.54	1.4	e12	e4	2.3	3	220	210	E.12	E.18	<1.0	2	3.2
MAR	04...	.54	8.2	e14	e14	1.4	2	250	250	E.15	E.17	E1.1	3	3.6
APR	15...	.40	<2.0	15	e8	1.9	2	230	240	<.10	.20	<1.0	2	6.2
JUN	24...	.33	<2.0	e190	290	2.2	3	220	220	E.13	.22	E1.4	<1	3.8
AUG	19...	.80	<2.0	430	660	3.4	4	240	240	.12	E.20	2.8	3	3.8

e Estimated value.
 E Estimated laboratory analysis value.

07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	CYANIDE TOTAL (MG/L AS CN) (00720)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)
	OCT 29...	4.9	<.01	<10	850	.27	2	6	50	<.01	<.01	6.5	8
DEC 10...	6.0	<.01	<10	770	E.23	2	E8	50	<.01	<.01	4.6	5	7
MAR 04...	9.4	<.01	<10	4490	E.31	3	10	90	<.01	.01	6.1	7	7
APR 15...	6.2	<.01	<10	310	.41	.8	E4	20	<.01	<.01	7.2	8	7
JUN 24...	6.0	--	<10	720	.47	1	E3	30	<.01	<.01	6.5	7	7
AUG 19...	6.5	--	<10	1170	E.32	5	E4	60	<.01	E.01	7.2	8	6

Date	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	SEDI- MENT, DIS- CHARGE, SUS- PENDEED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEED (T/DAY) (80155)
	OCT 29...	7	<.04	.04	20	20	58
DEC 10...	8	<.04	<.04	E20	E30	47	11.4
MAR 04...	7	<.04	.19	20	40	115	30.7
APR 15...	8	<.04	<.04	E20	20	18	2.1
JUN 24...	6	<.04	<.04	30	40	29	3.5
AUG 19...	6	<.04	.06	20	E30	78	15.3

E Estimated laboratory analysis value.

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.2	6.1	7.3	9.6	7.6	8.6	12.2	9.1	10.7	11.6	10.1	11.0
2	8.3	6.2	7.5	9.9	7.5	8.8	11.2	8.4	9.9	11.7	9.8	10.8
3	8.5	6.7	7.6	9.7	8.1	8.9	10.5	8.5	9.6	11.6	9.6	10.6
4	8.6	6.9	7.7	10.0	7.8	8.9	10.9	8.2	9.6	11.0	9.9	10.6
5	9.3	7.9	8.7	9.8	7.6	8.8	10.9	8.6	9.8	11.8	9.2	10.7
6	9.5	7.3	8.4	9.9	7.7	8.9	11.6	8.7	10.3	11.7	9.2	10.6
7	9.1	7.2	8.1	9.9	7.8	8.9	11.4	9.2	10.3	11.6	8.5	10.1
8	8.9	6.9	7.8	11.1	9.3	10	12.2	9.2	10.8	10.6	8.4	9.5
9	8.6	7.3	8.0	10.7	8.1	9.4	11.9	8.5	10.4	10.1	8.1	9.1
10	9.9	7.7	8.7	11.2	8.3	9.8	11.1	8.4	9.9	10.1	8.2	9.3
11	10.1	7.3	8.7	10.9	8.3	9.6	11.6	8.9	10.3	11.1	8.1	9.7
12	9.9	7.9	8.9	10.3	7.9	9.1	11.5	9.8	10.9	11.1	8.4	9.7
13	10.4	7.8	9.0	9.8	8.3	9.1	11.7	9.7	10.7	10.5	8.3	9.6
14	10.0	7.2	8.7	9.5	8.0	8.9	11.8	9.5	10.6	11.1	8.7	10.0
15	10.8	7.9	9.2	10.2	8.0	9.1	11.6	9.3	10.6	10.9	8.7	9.9
16	10.6	7.5	9.1	9.6	8.1	8.9	11.7	9.2	10.5	11.0	9.8	10.2
17	10.1	7.3	8.7	9.2	7.8	8.7	11.6	8.8	10.3	10.8	8.9	9.8
18	9.4	7.7	8.7	10.5	8.3	9.4	12.0	8.3	10.6	10.9	9.0	9.9
19	10.3	7.5	9.0	10.8	8.6	10	12.5	9.1	11.0	10.8	9.4	10.0
20	10.0	7.6	8.9	11.7	8.6	10.1	11.7	9.1	10.5	11.0	8.8	9.9
21	9.8	7.9	8.9	11.6	8.6	10.0	11.5	8.6	10.1	10.9	8.2	9.6
22	9.4	7.3	8.4	10.2	8.5	9.4	11.4	9.2	10.3	10.9	8.0	9.6
23	9.6	7.4	8.5	10.6	9.0	9.6	11.4	8.9	10.4	11.2	9.6	10.5
24	10.1	7.8	8.9	11.5	8.8	10.2	11.6	9.3	10.5	11.4	9.5	10.4
25	11.0	8.4	9.8	11.3	9.2	10.3	11.4	9.4	10.5	11.5	8.1	9.8
26	11.0	7.7	9.6	11.9	9.7	10.8	11.6	8.9	10.4	11.2	8.0	9.6
27	10.9	7.4	9.2	12.0	9.8	11.1	11.5	9.1	10.5	11.0	8.1	9.7
28	9.3	7.7	8.6	12.8	10.0	11.6	11.4	8.7	10.2	10.5	8.7	9.7
29	9.3	7.8	8.6	12.6	9.3	11.0	11.0	9.6	10.5	11.6	9.4	10.6
30	9.3	7.9	8.7	11.8	8.9	10.5	11.5	10.2	11.0	11.8	9.5	10.9
31	9.3	7.4	8.4	---	---	---	11.5	9.3	10.7	12.1	9.4	10.9
MONTH	11.0	6.1	8.6	12.8	7.5	9.6	12.5	8.2	10.4	12.1	8.0	10.1

ARKANSAS RIVER BASIN

07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	12.0	9.6	10.9	11.9	10.4	11.3	9.1	6.3	7.8	8.5	6.2	7.6
2	12.1	9.9	10.9	12.2	10.8	11.4	10.7	8.0	9.5	9.0	6.6	7.9
3	12.1	8.8	10.6	12.2	9.2	10.8	12.1	7.3	9.6	8.6	6.1	7.4
4	12.1	8.7	10.5	12.2	8.0	10.1	11.1	7.1	8.9	8.6	6.4	7.3
5	12.2	9.3	10.9	12.2	7.8	9.8	10.4	6.7	8.3	8.7	6.4	7.4
6	12.4	9.1	10.7	11.2	7.5	9.3	9.3	6.9	8.0	8.9	6.3	7.4
7	12.5	8.6	10.5	11.0	7.6	9.3	8.7	6.9	7.8	8.2	5.9	7.1
8	12.1	8.6	10.5	12.2	7.9	9.8	9.2	6.4	7.7	8.3	6.6	7.6
9	12.5	11.2	11.7	12.5	8.5	10.4	8.6	6.4	7.5	9.0	6.6	7.8
10	12.3	9.4	11.0	11.9	7.7	9.7	8.6	6.5	7.7	8.8	6.9	7.8
11	12.0	9.6	10.7	9.9	7.2	8.6	8.6	6.4	7.6	9.5	7.1	8.3
12	11.9	9.0	10.6	10.4	7.2	8.7	8.9	7.1	7.9	9.7	8.5	9.1
13	11.7	8.6	10.1	9.8	7.0	8.4	9.0	6.3	7.6	9.8	6.6	8.2
14	11.4	9.8	10.7	10.2	7.4	9.0	8.6	6.2	7.3	9.1	7.1	8.2
15	11.5	8.2	10	11.1	9.2	10.2	8.3	6.3	7.3	9.2	6.7	7.9
16	11.6	8.2	9.9	11.0	8.0	9.6	8.5	6.8	7.6	9.0	6.7	8.0
17	11.2	7.9	9.5	11.6	7.9	9.6	9.2	6.5	7.8	8.8	6.7	7.9
18	10.3	8.1	9.2	11.0	7.7	9.3	9.4	6.9	8.2	8.7	6.2	7.5
19	10.0	8.2	9.2	10.6	7.3	9.0	10.5	6.9	8.7	8.6	6.5	7.6
20	11.1	8.3	9.8	10.9	7.0	8.8	10.1	8.8	9.4	8.5	6.5	7.4
21	11.5	8.4	10.0	11.4	8.7	10.1	10.8	6.9	8.8	8.7	6.8	7.7
22	11.5	7.7	9.7	12.4	7.6	9.9	10.2	6.6	8.2	9.8	6.5	8.1
23	10.3	7.8	9.1	10.6	7.4	8.9	9.5	6.5	7.9	9.3	6.7	8.0
24	9.7	7.5	8.9	10.0	8.3	9.2	9.3	6.7	8.0	---	---	---
25	11.9	8.7	10.5	11.0	9.5	10.2	9.8	7.1	8.4	9.5	5.9	7.8
26	12.1	9.1	10.8	10.6	6.8	8.8	9.5	6.6	7.9	9.0	6.4	7.6
27	12.1	8.8	10.6	10.0	6.5	8.3	8.7	6.5	7.5	8.9	6.9	7.9
28	12.4	8.0	10.2	10.0	6.5	8.2	8.7	6.4	7.6	8.9	6.3	7.6
29	---	---	---	9.6	6.9	8.2	8.6	6.5	7.5	8.6	6.2	7.4
30	---	---	---	10.0	6.9	8.3	8.6	5.9	7.3	8.3	5.9	7.1
31	---	---	---	9.6	6.9	8.2	---	---	---	8.0	6.0	7.0
MONTH	12.5	7.5	10.3	12.5	6.5	9.4	12.1	5.9	8.0	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	8.0	6.2	7.1	7.4	5.9	6.5	8.1	6.4	7.1	6.7	5.5	6.1
2	7.9	6.0	7.0	7.2	5.9	6.5	8.1	6.3	7.3	6.9	5.5	6.3
3	8.1	6.0	7.1	7.2	5.8	6.4	7.5	6.1	6.9	7.1	5.8	6.5
4	8.3	7.3	7.7	7.0	5.6	6.4	7.6	6.0	6.9	7.0	5.7	6.5
5	8.5	6.0	7.3	---	---	---	7.4	5.9	6.7	7.5	5.7	6.6
6	8.2	5.8	7.0	---	---	---	7.5	5.7	6.7	7.3	5.8	6.6
7	8.0	5.7	6.9	---	---	---	7.6	5.8	6.7	7.3	5.9	6.6
8	8.0	5.9	6.9	---	---	---	7.3	5.6	6.6	7.4	5.8	6.7
9	7.8	5.7	6.8	6.9	5.1	6.0	7.6	6.0	6.9	7.3	6.6	7.0
10	7.8	5.9	6.8	7.1	5.6	6.5	7.5	5.8	6.7	7.6	7.0	7.3
11	7.9	5.9	6.9	7.4	5.2	6.3	7.4	5.7	6.5	7.7	6.6	7.2
12	7.2	5.4	6.3	7.0	5.2	6.2	7.9	5.9	6.9	7.8	6.4	7.2
13	8.0	5.5	6.6	7.3	5.2	6.3	8.1	6.2	7.1	8.1	6.6	7.5
14	7.5	5.8	6.6	7.3	5.2	6.3	8.0	5.7	6.8	8.1	6.4	7.4
15	7.4	4.8	6.3	6.9	5.3	6.2	8.0	5.8	6.8	8.4	6.5	7.5
16	7.1	4.6	6.0	7.3	5.5	6.5	7.5	6.2	6.8	8.6	6.3	7.5
17	7.7	5.5	6.7	7.1	5.6	6.4	8.4	6.4	7.4	8.4	6.0	7.5
18	7.7	5.6	6.6	7.3	5.5	6.5	8.2	6.5	7.3	8.6	7.4	8.1
19	7.8	5.5	6.6	7.4	5.8	6.6	8.0	6.0	7.0	8.8	6.4	8.0
20	7.4	6.0	6.9	7.2	5.5	6.3	7.4	5.9	6.7	8.9	6.2	7.7
21	7.7	5.8	6.7	7.2	5.2	6.3	7.5	5.9	6.7	8.7	6.7	7.8
22	7.2	5.6	6.5	6.5	5.0	5.8	7.3	5.0	6.3	9.1	6.9	8.0
23	7.3	5.6	6.4	7.1	5.6	6.4	7.5	4.4	5.6	9.2	6.9	8.0
24	7.3	5.9	6.7	7.5	5.8	6.8	8.1	4.4	6.4	9.0	6.7	7.9
25	7.5	6.1	6.9	7.7	6.1	7.0	7.4	5.5	6.5	9.0	7.0	8.0
26	7.7	6.0	6.8	7.8	6.1	7.1	7.6	5.5	6.5	8.8	7.1	8.0
27	7.7	5.7	6.7	7.3	5.2	6.5	7.3	5.9	6.7	8.8	7.2	8.1
28	7.5	5.8	6.7	7.5	5.3	6.7	7.0	5.7	6.6	8.7	7.0	7.9
29	7.7	6.0	6.7	7.5	5.9	6.8	7.5	6.4	7.2	8.6	7.0	7.9
30	7.4	6.2	6.7	7.3	5.9	6.6	7.6	5.8	6.4	8.9	7.0	8.0
31	---	---	---	7.3	6.1	6.7	7.1	5.6	6.4	---	---	---
MONTH	8.5	4.6	6.8	---	---	---	8.4	4.4	6.7	9.2	5.5	7.4

ARKANSAS RIVER BASIN

07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO--Continued

PH, WATER, WHOLE, FIELD (STANDARD UNITS), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
1	8.3	8.1	8.2	8.4	8.2	8.2	8.3	8.3	8.3	8.3	8.3	8.3
2	8.3	8.1	8.2	8.4	8.3	8.3	8.3	8.3	8.3	8.3	8.2	8.3
3	8.3	8.2	8.2	8.4	8.3	8.3	8.3	8.3	8.3	8.3	8.2	8.3
4	8.4	8.2	8.2	8.4	8.3	8.3	8.4	8.3	8.3	8.3	8.3	8.3
5	8.3	8.2	8.2	8.4	8.3	8.3	8.4	8.3	8.3	8.3	8.3	8.3
6	8.3	8.2	8.2	8.3	8.2	8.3	8.4	8.3	8.3	8.3	8.3	8.3
7	8.3	8.2	8.2	8.3	8.2	8.2	8.3	8.2	8.2	8.3	8.3	8.3
8	8.3	8.2	8.2	8.2	8.1	8.2	8.3	8.2	8.2	8.3	8.3	8.3
9	8.3	8.2	8.2	8.3	8.2	8.2	8.3	8.2	8.2	8.3	8.3	8.3
10	8.3	8.2	8.2	8.3	8.2	8.2	8.3	8.2	8.2	8.3	8.3	8.3
11	8.3	8.2	8.2	8.3	8.2	8.2	8.3	8.2	8.2	8.3	8.2	8.3
12	8.3	8.2	8.2	8.3	8.2	8.2	8.3	8.2	8.2	8.3	8.3	8.3
13	8.3	8.2	8.2	8.3	8.2	8.2	8.5	8.2	8.3	8.3	8.3	8.3
14	8.3	8.2	8.2	8.3	8.2	8.2	8.4	8.3	8.4	8.3	8.3	8.3
15	8.3	8.2	8.2	8.2	8.1	8.2	8.4	8.4	8.4	8.3	8.2	8.3
16	8.3	8.2	8.2	8.2	8.1	8.1	8.4	8.3	8.3	8.3	8.2	8.3
17	8.3	8.2	8.3	8.2	8.1	8.1	8.3	8.2	8.3	8.3	8.2	8.3
18	8.3	8.2	8.3	8.2	8.1	8.1	8.3	8.3	8.3	8.3	8.2	8.3
19	8.4	8.2	8.3	8.2	8.1	8.1	8.3	8.3	8.3	8.3	8.2	8.3
20	8.3	8.2	8.3	8.2	8.1	8.2	8.4	8.3	8.3	8.4	8.2	8.3
21	8.3	8.2	8.3	8.2	8.1	8.2	8.4	8.3	8.3	8.3	8.3	8.3
22	8.4	8.2	8.3	8.2	8.1	8.2	8.4	8.3	8.4	8.4	8.2	8.3
23	8.4	8.2	8.3	8.2	8.1	8.2	8.4	8.3	8.3	8.3	8.2	8.2
24	8.4	8.2	8.3	8.2	8.1	8.1	8.4	8.3	8.4	8.3	8.1	8.2
25	8.3	8.2	8.2	8.2	8.1	8.2	8.4	8.3	8.4	8.3	8.2	8.3
26	8.3	8.1	8.2	8.2	8.1	8.2	8.4	8.4	8.4	8.3	8.2	8.3
27	8.2	8.1	8.1	8.2	8.1	8.2	8.4	8.3	8.3	8.3	8.2	8.3
28	8.3	8.1	8.2	8.2	8.1	8.2	8.3	8.3	8.3	8.3	8.2	8.3
29	8.3	8.1	8.2	8.2	8.1	8.2	8.3	8.3	8.3	8.3	8.3	8.3
30	8.3	8.2	8.2	8.4	8.2	8.2	8.3	8.3	8.3	8.3	8.3	8.3
31	8.3	8.2	8.2	---	---	---	8.3	8.3	8.3	8.3	8.3	8.3
MAX	8.4	8.2	8.3	8.4	8.3	8.3	8.5	8.4	8.4	8.4	8.3	8.3
MIN	8.2	8.1	8.1	8.2	8.1	8.1	8.3	8.2	8.2	8.3	8.1	8.2

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
1	8.3	8.2	8.3	8.2	8.1	8.2	8.3	8.2	8.2	8.3	8.0	8.1
2	8.3	8.2	8.3	8.3	8.1	8.2	8.3	8.2	8.2	8.2	8.1	8.1
3	8.2	8.1	8.2	8.3	8.1	8.2	8.4	8.2	8.3	8.2	8.0	8.1
4	8.2	8.1	8.2	8.3	8.1	8.2	8.3	8.0	8.2	8.2	8.0	8.1
5	8.2	8.2	8.2	8.3	8.2	8.2	8.2	8.0	8.0	8.1	8.0	8.1
6	8.2	8.1	8.2	8.3	8.2	8.2	8.2	8.0	8.0	8.2	8.0	8.1
7	8.3	8.2	8.2	8.3	8.2	8.3	8.2	8.0	8.0	8.2	8.0	8.1
8	8.3	8.2	8.2	8.3	8.3	8.3	8.3	8.0	8.1	8.2	8.0	8.1
9	8.3	8.2	8.2	8.3	8.2	8.3	8.5	8.1	8.2	8.2	8.0	8.1
10	8.3	8.1	8.2	8.3	8.2	8.2	8.5	8.2	8.2	8.3	8.1	8.1
11	8.3	8.2	8.2	8.3	8.2	8.2	8.5	8.2	8.2	8.3	8.1	8.2
12	8.3	8.2	8.3	8.4	8.2	8.3	8.5	8.2	8.3	8.2	7.9	8.1
13	8.4	8.2	8.3	8.4	8.2	8.3	8.5	8.2	8.2	8.1	7.9	7.9
14	8.4	8.3	8.3	8.4	8.3	8.3	8.4	8.1	8.1	8.2	8.0	8.1
15	8.3	8.2	8.3	8.4	8.3	8.3	8.4	8.1	8.2	8.2	8.1	8.1
16	8.2	8.1	8.2	8.4	8.2	8.3	8.3	8.0	8.2	8.2	8.1	8.1
17	8.2	8.1	8.2	8.4	8.2	8.3	8.3	8.0	8.1	8.1	7.9	8.0
18	8.2	8.1	8.2	8.4	8.2	8.3	8.2	8.0	8.1	8.1	8.0	8.0
19	8.2	8.1	8.2	8.4	8.3	8.3	8.2	8.0	8.1	8.1	8.1	8.1
20	8.3	8.2	8.2	8.5	8.3	8.3	8.1	8.0	8.1	8.2	8.0	8.1
21	8.3	8.2	8.2	8.4	8.3	8.3	8.1	8.0	8.0	8.3	8.1	8.1
22	8.3	8.2	8.2	8.4	8.2	8.2	8.2	8.0	8.0	8.3	8.1	8.2
23	8.2	8.1	8.2	8.4	8.2	8.3	8.2	8.0	8.0	8.3	8.1	8.2
24	8.2	8.1	8.1	8.4	8.2	8.2	8.2	8.0	8.1	8.2	7.8	7.9
25	8.2	8.1	8.1	8.2	8.0	8.1	8.2	8.0	8.1	8.1	8.0	8.1
26	8.2	8.1	8.1	8.2	8.0	8.0	8.2	8.1	8.1	8.2	8.1	8.1
27	8.4	8.1	8.2	8.2	8.1	8.1	8.2	8.1	8.1	8.2	8.1	8.2
28	8.3	8.2	8.2	8.3	8.2	8.2	8.2	8.1	8.1	8.2	8.1	8.2
29	---	---	---	8.3	8.1	8.2	8.2	8.0	8.1	8.2	7.9	8.0
30	---	---	---	8.4	8.2	8.3	8.2	8.0	8.1	8.1	7.9	8.0
31	---	---	---	8.4	8.2	8.3	---	---	---	8.1	7.9	8.0
MAX	8.4	8.3	8.3	8.5	8.3	8.3	8.5	8.2	8.3	8.3	8.1	8.2
MIN	8.2	8.1	8.1	8.2	8.0	8.0	8.1	8.0	8.0	8.1	7.8	7.9

ARKANSAS RIVER BASIN

07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO--Continued

PH, WATER, WHOLE, FIELD (STANDARD UNITS), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
1	8.1	7.9	8.0	8.3	8.1	8.2	8.1	8.0	8.1	8.2	8.1	8.1
2	8.1	7.9	8.0	8.4	8.1	8.2	8.1	8.0	8.0	8.2	8.1	8.1
3	8.1	8.0	8.0	8.3	8.1	8.1	8.1	8.0	8.0	8.2	8.0	8.1
4	8.0	7.9	8.0	8.3	8.1	8.2	8.1	8.0	8.1	8.2	8.0	8.1
5	8.0	7.9	8.0	8.3	7.9	8.2	8.2	8.0	8.1	8.3	8.1	8.1
6	8.0	7.9	8.0	8.1	7.8	7.8	8.2	8.0	8.1	8.3	8.0	8.1
7	8.1	8.0	8.0	---	---	---	8.2	8.0	8.1	8.2	8.1	8.1
8	8.1	8.0	8.0	---	---	---	8.2	8.0	8.1	8.2	8.1	8.1
9	8.1	8.0	8.1	8.2	8.1	8.1	8.2	8.0	8.1	8.2	8.1	8.1
10	8.1	8.0	8.1	8.1	8.0	8.1	8.2	8.0	8.1	8.1	7.9	7.9
11	8.1	8.0	8.1	8.1	8.0	8.1	8.2	8.0	8.1	8.0	8.0	8.0
12	8.0	7.8	8.0	8.2	8.1	8.1	8.3	8.0	8.1	8.1	7.9	8.0
13	8.0	7.9	8.0	8.2	8.1	8.1	8.4	8.1	8.2	8.1	7.9	8.0
14	8.1	7.9	8.0	8.2	8.1	8.2	8.3	8.1	8.2	8.2	8.1	8.2
15	8.0	7.8	7.9	8.3	8.1	8.2	8.3	8.1	8.2	8.2	8.2	8.2
16	8.1	7.9	8.0	8.4	8.1	8.2	8.3	8.0	8.1	8.3	8.2	8.2
17	8.1	8.0	8.0	8.4	8.1	8.2	8.1	7.8	8.0	8.3	8.2	8.2
18	8.2	8.0	8.1	8.4	8.1	8.2	8.0	7.8	8.0	8.3	8.2	8.2
19	8.2	8.0	8.1	8.4	8.1	8.2	8.2	7.9	8.0	8.2	8.1	8.2
20	8.2	8.0	8.1	8.3	8.2	8.2	8.2	7.9	8.0	8.3	8.2	8.2
21	8.2	8.0	8.1	8.3	7.8	8.2	8.1	7.7	8.0	8.3	8.2	8.2
22	8.2	8.0	8.1	8.2	7.8	8.1	8.3	7.7	7.9	8.3	8.2	8.3
23	8.2	8.0	8.1	8.3	8.1	8.2	8.6	8.0	8.0	8.3	8.2	8.3
24	8.1	8.1	8.1	8.4	8.1	8.2	8.2	7.9	8.0	8.4	8.2	8.3
25	8.1	8.1	8.1	8.3	8.1	8.3	8.2	8.0	8.1	8.4	8.2	8.3
26	8.2	8.1	8.1	8.3	8.2	8.3	8.2	8.1	8.1	8.4	8.3	8.3
27	8.2	8.1	8.1	8.4	8.1	8.2	8.2	8.1	8.1	8.3	8.2	8.3
28	8.2	8.1	8.2	8.2	8.0	8.1	8.2	8.1	8.1	8.4	8.2	8.3
29	8.3	8.1	8.2	8.1	8.0	8.1	8.2	7.9	8.1	8.4	8.3	8.3
30	8.3	8.1	8.2	8.1	8.0	8.0	8.2	7.8	8.1	8.4	8.3	8.3
31	---	---	---	8.2	8.0	8.1	8.2	8.1	8.1	---	---	---
MAX	8.3	8.1	8.2	---	---	---	8.6	8.1	8.2	8.4	8.3	8.3
MIN	8.0	7.8	7.9	---	---	---	8.0	7.7	7.9	8.0	7.9	7.9

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1070	954	1010	1070	1010	1040	1050	976	1000	1110	1010	1070
2	1020	908	968	1090	959	1010	1040	960	999	1150	1010	1090
3	1030	923	964	1060	935	980	1040	960	989	1170	1090	1120
4	1010	897	952	1040	876	950	1080	998	1030	1150	1080	1130
5	1020	926	958	1020	947	986	1080	1000	1040	1150	1060	1100
6	1020	928	965	1030	958	986	1110	1040	1070	1140	1040	1090
7	1010	914	966	1040	967	991	1100	1040	1060	1130	1010	1070
8	1020	932	968	990	929	962	1110	1040	1070	1140	1040	1070
9	1030	907	963	1020	952	980	1110	1020	1060	1120	1040	1070
10	1010	875	942	1030	956	985	1100	1020	1050	1140	1010	1060
11	1030	897	952	1030	934	983	1100	1010	1050	1210	1070	1180
12	1040	911	957	1020	931	972	1100	1010	1050	1100	1010	1060
13	1020	921	962	1030	955	984	1090	1010	1030	1130	1000	1050
14	1050	914	974	1030	952	995	1090	1010	1040	1170	1040	1090
15	1060	926	981	1040	969	997	1100	1010	1050	1080	977	1030
16	1100	953	1010	1020	942	977	1090	1010	1040	1120	967	1040
17	1170	1040	1080	1030	935	989	1090	970	1020	1160	1030	1060
18	1180	1080	1120	1020	909	972	1100	1000	1030	1140	1040	1070
19	1220	1080	1130	1010	901	950	1100	1010	1040	1130	1020	1070
20	1240	1100	1160	1000	937	959	1080	1000	1030	1120	1010	1050
21	1260	1100	1170	998	929	955	1090	1010	1040	1120	999	1040
22	1260	1100	1160	1000	913	956	1100	1010	1040	1120	996	1050
23	1140	1030	1090	975	888	939	1240	1090	1190	1130	1040	1080
24	1060	993	1030	968	892	923	1140	1040	1090	1160	1060	1110
25	1060	975	1010	1010	901	941	1130	1040	1080	1170	1070	1110
26	1040	949	997	995	915	950	1130	1030	1080	1160	1030	1080
27	1030	950	983	1110	922	1030	1110	997	1050	1120	1040	1080
28	1100	949	1000	1080	1010	1040	1130	994	1060	1110	1020	1060
29	1090	929	997	1060	987	1010	1100	1020	1060	1110	1010	1050
30	1080	989	1030	1110	976	1020	1110	1020	1050	1100	1010	1040
31	1120	1000	1040	---	---	---	1120	1020	1070	1120	1020	1050
MONTH	1260	875	1020	1110	876	980	1240	960	1050	1210	967	1070

ARKANSAS RIVER BASIN

07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	1130	1040	1060	910	787	867	1070	909	969	1160	1070	1110
2	1110	1010	1060	1000	813	903	1020	952	984	1160	1020	1090
3	1110	1000	1040	959	710	861	1060	957	990	1160	1030	1080
4	1100	987	1020	964	844	890	1050	953	988	1160	1030	1100
5	1090	976	1030	968	851	903	1050	961	989	1180	1040	1100
6	1110	986	1030	990	877	926	1050	946	992	1170	1030	1110
7	1100	985	1030	1060	942	991	1060	944	992	1210	1080	1130
8	1090	973	1020	1010	912	958	1050	943	983	1200	1070	1130
9	1090	1000	1030	1040	905	961	1060	963	994	1190	1050	1110
10	1100	1010	1040	933	848	899	1060	951	999	1200	1060	1110
11	1060	971	993	976	838	897	1070	956	1020	1190	1050	1100
12	1110	1000	1040	985	877	921	1050	971	1020	1090	955	1040
13	1140	1020	1070	959	884	920	1110	1020	1060	1160	946	1040
14	1130	963	1050	1010	894	957	1110	1020	1060	1200	1060	1110
15	1070	927	1020	950	870	907	1130	983	1050	1220	1080	1140
16	1160	947	1060	982	840	937	1170	1000	1090	1170	1080	1120
17	1000	910	955	996	875	956	1170	1030	1100	1090	842	993
18	981	914	942	932	858	890	1150	1060	1090	1200	1040	1110
19	997	913	952	942	848	892	1160	1030	1090	1180	1040	1110
20	1020	936	969	950	874	902	1130	1040	1080	1160	1020	1080
21	1030	959	987	949	882	906	1190	1040	1110	1190	1060	1100
22	1060	967	1000	977	888	919	1180	1020	1090	1180	1040	1090
23	1080	993	1020	982	904	934	1190	1040	1100	1160	1050	1090
24	1100	1000	1040	985	890	936	1160	1040	1090	1050	479	669
25	1050	910	1000	1070	866	897	1160	1010	1080	990	644	856
26	1080	849	965	1120	913	1010	1160	1010	1080	1070	920	1000
27	1020	877	945	946	861	904	1180	1050	1110	1020	908	968
28	972	828	889	982	898	936	1200	1050	1120	1160	908	1030
29	---	---	---	1010	901	960	1160	1040	1100	1160	1000	1070
30	---	---	---	1000	917	957	1160	1040	1090	1140	1040	1080
31	---	---	---	998	886	942	---	---	---	1120	1020	1050
MONTH	1160	828	1010	1120	710	924	1200	909	1050	1220	479	1060
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	1090	1000	1050	1140	1020	1080	1080	974	1010	1060	937	1000
2	1100	995	1040	1090	960	1030	1070	973	1010	1060	940	999
3	1100	992	1030	1020	914	967	1080	981	1020	1060	935	976
4	1010	875	948	1040	941	983	1060	964	1000	1060	967	993
5	1020	899	958	1060	398	974	1060	946	992	1060	957	991
6	1140	898	1030	669	362	498	1060	953	994	1080	955	999
7	1170	1050	1090	---	---	---	1080	966	1010	1060	957	999
8	1160	1070	1100	---	---	---	1080	939	1010	1060	885	990
9	1190	1070	1110	1140	1010	1080	1060	946	999	1030	885	974
10	1180	1070	1110	1010	791	933	1090	956	1010	941	499	641
11	1100	984	1070	1000	620	837	1080	948	1010	979	644	858
12	1070	758	972	1120	970	1030	1070	927	985	1080	505	914
13	1020	870	964	1130	1020	1060	1020	923	960	991	561	818
14	1100	752	1030	1140	1020	1060	1040	926	972	1100	982	1050
15	956	639	831	1140	1020	1060	1050	951	983	1160	1060	1110
16	---	---	---	1130	976	1050	1080	940	992	1110	1040	1070
17	1070	946	1000	1040	963	989	1080	969	1000	1080	999	1040
18	1100	946	1020	1090	940	984	1070	955	989	1070	1010	1040
19	1100	995	1030	1040	966	992	1060	946	979	1050	724	919
20	1060	981	1010	1060	971	1010	1050	945	976	1100	999	1040
21	1080	982	1010	1060	612	985	1050	727	977	1090	1010	1050
22	1070	949	996	953	610	842	1040	750	932	1080	999	1040
23	1070	949	1010	1060	966	1000	1060	950	980	1110	991	1030
24	1080	964	1000	1080	980	1010	977	536	750	1080	999	1040
25	1040	952	993	1070	963	1010	1080	936	1010	1100	1010	1050
26	1090	999	1040	990	872	937	1090	925	1010	1090	991	1050
27	1150	1010	1060	905	684	819	1060	980	1010	1080	1010	1040
28	1130	1020	1070	1020	888	953	1070	916	1000	1090	1020	1060
29	1110	1020	1060	1070	947	998	1080	939	1000	1110	1020	1060
30	1110	1050	1080	1070	983	1020	1060	916	982	1110	1030	1060
31	---	---	---	1060	953	1010	1070	963	1000	---	---	---
MONTH	---	---	---	---	---	---	1090	536	986	1160	499	997

ARKANSAS RIVER BASIN

07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO--Continued

WATER TEMPERATURE (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	23.1	13.2	17.3	15.7	8.0	11.3	8.2	1.4	4.4	4.5	0.7	2.2
2	21.2	12.5	16.4	15.7	7.7	11.1	10.1	3.0	5.9	5.3	0.0	1.5
3	21.7	12.2	16.3	14.4	8.1	10.9	9.2	4.1	6.2	6.0	0.0	2.1
4	20.7	11.6	15.5	15.5	7.4	11.0	9.9	3.1	6.0	4.7	2.2	3.2
5	15.4	10.0	12.1	16.5	7.7	11.5	8.9	3.1	5.5	6.8	0.0	2.9
6	19.4	9.1	13.6	16.2	8.6	11.7	8.5	1.6	4.6	6.9	0.0	2.8
7	18.4	10.0	13.9	15.7	8.2	11.4	7.2	2.1	4.2	8.7	0.6	4.4
8	20.4	10.6	15.1	9.4	5.7	8.0	7.2	0.0	2.9	8.8	3.0	5.7
9	18.0	11.3	13.7	14.2	6.2	9.7	8.2	0.2	3.7	9.3	3.8	6.3
10	16.2	8.1	11.8	13.5	5.0	8.8	8.7	2.1	4.5	9.2	3.9	5.9
11	17.6	7.3	11.7	13.5	5.6	9.2	7.1	1.0	3.6	9.3	1.2	4.8
12	14.6	7.9	10.8	14.6	6.9	10.3	4.9	1.0	2.3	8.2	1.5	4.6
13	15.6	6.5	10.7	13.4	8.0	10.3	6.3	0.0	2.3	8.1	2.2	4.3
14	17.7	7.3	11.6	14.4	8.7	10.9	6.6	0.0	3.0	6.8	0.0	2.6
15	15.4	5.9	10.2	14.3	7.2	10.3	6.7	0.5	3.1	6.5	0.0	2.2
16	16.9	6.5	10.9	13.6	8.5	10.7	7.3	1.0	3.7	4.0	0.0	1.1
17	18.7	7.3	12.2	14.8	9.4	11.3	8.9	1.2	4.4	6.5	0.0	1.7
18	15.9	9.0	11.5	13.2	6.6	9.1	8.2	1.5	4.1	6.3	0.0	1.6
19	17.3	6.8	11.2	11.9	6.1	8.2	7.9	0.0	3.2	5.7	0.0	1.6
20	16.6	7.4	11.2	12.0	4.1	7.6	6.9	0.6	3.3	6.6	0.0	2.1
21	15.5	8.0	11.2	11.9	4.0	7.6	7.6	0.4	3.6	8.5	0.0	3.3
22	18.8	9.0	12.7	11.5	6.5	8.4	6.4	0.8	3.3	9.2	1.5	4.9
23	17.4	8.4	12.1	8.9	5.2	7.5	7.0	1.0	3.1	5.4	0.0	2.9
24	15.5	7.4	11.2	10.1	3.3	6.1	6.3	0.0	2.4	6.5	0.0	2.0
25	13.4	5.4	8.7	8.5	3.5	5.6	6.0	0.0	2.1	10.3	0.0	4.1
26	14.1	5.6	9.1	7.4	2.6	4.7	7.2	0.0	2.8	10.7	1.8	6.0
27	15.7	5.5	10.1	7.1	2.2	4.1	6.7	0.7	3.2	10.2	2.7	5.8
28	15.9	8.8	11.7	6.6	0.0	2.7	7.5	0.4	3.3	8.2	3.6	5.5
29	16.1	9.2	11.9	7.8	0.2	3.6	5.4	2.1	3.2	6.7	1.4	3.8
30	14.7	9.4	11.5	9.0	2.2	4.9	4.3	0.2	2.1	6.6	0.3	2.6
31	17.3	9.3	12.1	---	---	---	6.2	0.8	2.6	7.6	0.0	2.5
MONTH	23.1	5.4	12.3	16.5	0.0	8.6	10.1	0.0	3.6	10.7	0.0	3.5
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.3	0.0	2.3	4.0	0.0	0.6	19.4	7.5	12.7	21.5	9.3	13.5
2	6.7	0.0	2.6	4.4	0.0	1.3	11.1	4.6	7.1	20.6	8.3	13.1
3	9.2	0.0	3.4	8.4	0.0	2.9	14.9	1.9	8.0	21.5	9.3	14.8
4	9.7	0.0	3.6	12.1	0.0	5.2	16.8	3.7	9.6	22.1	9.4	15.3
5	8.4	0.0	3.5	13.6	1.5	7.1	18.9	4.9	11.6	22.6	10.1	15.9
6	9.1	0.0	3.5	14.2	3.6	8.2	16.8	7.1	12.0	23.6	10.3	15.9
7	11.0	0.0	4.8	13.7	3.4	7.9	16.7	8.7	12.0	23.7	11.0	16.5
8	10.6	2.1	5.5	12.6	1.3	6.5	19.0	7.3	12.6	18.9	10.8	13.8
9	3.9	0.0	1.5	11.1	0.0	4.6	20.5	9.2	13.8	20.1	9.0	13.7
10	7.3	0.0	2.3	13.0	1.8	7.0	19.7	9.2	13.0	23.2	9.4	15.5
11	5.7	0.0	2.6	15.5	5.3	9.6	20.6	9.1	13.4	23.2	10.5	15.5
12	7.6	0.5	3.2	15.8	4.7	9.9	17.2	8.5	12.6	16.1	10.3	12.4
13	8.5	0.0	3.0	16.4	6.0	10.6	21.8	8.3	14.4	23.0	8.9	15.2
14	4.3	0.3	2.2	14.8	5.6	8.8	22.1	9.3	15.1	19.9	11.4	14.7
15	9.9	0.0	4.3	8.6	3.7	5.9	22.7	10.7	15.6	23.3	11.2	16.4
16	9.7	0.4	4.7	12.8	3.6	7.3	19.2	10.0	14.2	22.4	11.8	16.0
17	11.0	1.9	6.1	12.9	2.1	7.1	21.8	8.8	14.4	18.8	13.2	14.9
18	10.3	3.9	6.8	13.0	3.3	8.0	20.8	9.1	13.8	23.4	11.7	16.5
19	10.8	5.0	7.1	15.6	4.4	9.3	19.9	6.9	12.3	22.7	12.4	16.5
20	10.6	2.9	6.2	17.4	4.0	10.2	10.8	7.3	9.4	24.3	12.8	17.9
21	10.5	2.5	5.8	10.7	3.5	6.6	18.6	5.5	11.4	22.2	12.7	16.9
22	13.1	2.2	6.8	14.8	1.4	7.5	20.6	6.8	13.4	23.6	9.9	16.0
23	12.4	4.7	8.0	15.5	4.6	9.5	21.1	7.8	14.0	23.3	11.3	16.1
24	12.6	4.9	7.8	11.2	5.3	7.8	20.4	8.5	13.7	16.2	11.6	13.6
25	8.8	0.4	4.0	6.8	3.3	5.3	18.2	7.2	12.1	23.8	10.2	16.2
26	7.8	0.0	2.7	15.7	4.0	9.0	20.3	7.9	13.6	24.0	11.9	17.6
27	8.6	0.0	3.4	16.6	5.3	10.5	21.8	9.6	14.8	22.9	12.8	16.6
28	11.6	0.0	4.8	18.1	6.0	11.3	22.1	9.4	14.6	26.1	12.7	18.6
29	---	---	---	16.1	6.6	10.9	21.2	9.7	14.6	26.0	13.7	19.2
30	---	---	---	17.7	5.3	11.2	22.1	9.4	14.9	28.1	14.5	20.8
31	---	---	---	17.5	6.4	11.5	---	---	---	28.1	15.4	20.7
MONTH	13.1	0.0	4.4	18.1	0.0	7.7	22.7	1.9	12.8	28.1	8.3	16.0

ARKANSAS RIVER BASIN

07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO--Continued

WATER TEMPERATURE (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	26.2	15.7	20.4	28.9	17.0	22.6	25.3	16.3	20.7	27.2	17.5	21.8
2	27.6	15.8	20.2	28.4	17.5	22.2	26.3	15.3	20.0	27.8	16.1	21.0
3	26.8	14.6	20.1	27.0	17.6	21.8	27.1	17.3	21.7	25.1	16.2	19.9
4	17.9	14.7	16.4	28.3	17.9	22.2	27.6	17.8	22.2	28.0	17.1	20.9
5	26.5	13.0	19.0	28.1	18.3	21.9	29.0	18.2	22.7	28.0	15.7	21.2
6	27.8	14.1	20.4	24.5	18.0	20.7	28.8	17.6	22.3	27.4	16.7	21.3
7	27.2	15.0	20.5	---	---	---	28.4	16.9	21.9	27.7	17.3	21.8
8	27.9	15.2	20.6	---	---	---	28.7	17.5	22.1	28.2	17.2	21.8
9	28.2	15.2	21.0	28.9	19.3	23.5	26.8	16.4	20.7	24.2	18.2	20.3
10	27.5	15.6	20.9	29.0	18.0	21.2	28.0	16.7	21.7	19.9	17.3	18.3
11	28.0	15.4	21.1	29.2	16.6	22.1	29.7	17.0	22.6	21.9	16.3	18.4
12	28.5	17.1	22.0	29.8	17.6	22.6	27.2	14.7	20.8	26.8	16.1	20.3
13	26.0	15.5	20.6	28.5	16.5	22.0	26.5	15.1	20.2	23.8	15.5	18.3
14	26.6	17.3	21.1	29.7	17.3	22.8	27.1	15.1	20.9	22.9	14.8	18.0
15	23.7	16.0	19.6	30.0	17.9	23.2	27.6	15.5	21.2	25.9	13.8	18.7
16	26.5	16.1	20.1	29.4	17.0	22.9	28.1	17.2	22.3	25.3	13.6	18.5
17	28.7	15.4	20.9	30.0	17.5	23.2	26.0	15.1	20.3	23.6	13.9	18.1
18	27.3	15.5	21.1	30.3	17.5	23.1	25.2	15.6	20.1	21.0	14.0	16.1
19	28.5	15.2	21.2	29.8	17.4	23.1	28.1	15.8	21.3	23.0	12.8	16.5
20	26.1	17.2	20.2	29.8	18.0	23.1	28.7	18.8	22.9	24.1	12.0	17.3
21	27.3	15.8	21.0	29.2	18.4	22.5	27.8	18.4	22.1	23.6	13.0	17.3
22	27.4	17.4	21.4	28.8	18.7	22.9	27.4	17.3	21.4	22.9	12.0	16.9
23	27.7	16.8	21.6	27.4	18.1	22.1	25.6	16.9	21.2	22.9	11.7	16.7
24	25.9	16.4	20.1	29.6	17.0	23.0	27.1	15.1	20.7	24.8	12.2	17.1
25	25.4	15.9	19.2	29.0	18.2	22.7	29.3	19.9	23.2	22.5	12.4	16.6
26	27.9	15.3	20.4	29.5	17.2	22.5	29.9	18.2	23.4	22.2	13.2	16.5
27	28.1	15.5	20.9	28.7	18.1	22.4	26.7	19.1	21.8	20.2	12.1	15.5
28	28.7	15.9	21.4	26.9	17.9	22.0	27.9	19.7	22.2	22.9	13.3	16.7
29	28.0	15.8	21.6	28.5	17.0	22.0	28.0	17.3	21.2	21.4	12.5	16.2
30	27.9	16.7	21.9	29.6	17.4	22.7	28.0	16.6	21.2	22.2	11.9	16.1
31	---	---	---	29.4	17.2	22.9	27.6	16.5	21.4	---	---	---
MONTH	28.7	13.0	20.6	---	---	---	29.9	14.7	21.6	28.2	11.7	18.5

07106300 FOUNTAIN CREEK NEAR PINON, CO

LOCATION.--Lat 38°26'23", long 104°35'35", in NW¹/₄SE¹/₄ sec.31, T.18 S., R.64 W., Pueblo County, Hydrologic Unit 11020003, on right bank 0.5 mi below Pinon Road bridge, 0.9 mi northeast of Pinon, and 2.7 mi upstream from Steele Hollow Creek.

DRAINAGE AREA.--849 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1973 to current year. Low-flow records may not be equivalent prior to October 1995, as a result of varying underflow (diversion system) entering between the sites.

REVISED RECORDS.--WDR CO-80-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,990 ft above sea level, from topographic map. Apr. 10, 1973 to Apr. 22, 1976, non-recording gage, and Apr. 23, 1976 to Sept. 30, 1995, water-stage recorder at site 0.5 mi upstream at different datum. Oct. 1, 1995 to present at various locations within 70 ft. downstream from underflow mouth (see district office for location history).

REMARKS.--No estimated daily discharges. Records fair. Natural flow of stream affected by storage reservoirs, power developments, ground-water withdrawals, transbasin and transmountain diversions, diversions for irrigation and municipal use, return flows from irrigated areas, and flows from sewage-treatment plants.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	119	141	104	94	141	114	37	49	37	55	47
2	67	123	136	103	94	118	89	37	50	36	53	46
3	67	127	145	103	95	131	80	40	49	45	53	48
4	67	133	129	108	97	147	80	40	79	47	54	48
5	74	141	119	108	102	162	75	36	93	46	55	45
6	76	134	108	108	99	166	74	32	43	859	54	45
7	82	125	105	107	100	156	69	29	37	157	51	44
8	80	147	103	111	106	149	70	28	35	79	50	45
9	76	147	104	111	100	138	67	30	36	50	50	48
10	72	142	111	111	92	145	63	32	35	64	52	158
11	67	138	117	115	101	148	60	30	34	84	50	139
12	63	139	112	106	102	143	58	33	62	47	50	62
13	69	140	105	107	100	138	50	73	62	40	53	194
14	70	137	106	103	106	133	48	42	47	43	55	80
15	70	130	109	100	124	137	48	29	137	44	50	48
16	65	134	112	102	146	147	45	30	77	46	50	41
17	64	137	106	98	143	151	42	55	57	56	49	45
18	61	140	112	94	143	147	40	46	55	60	48	48
19	58	144	112	88	145	136	42	42	51	59	49	75
20	52	141	109	93	143	129	43	47	52	58	50	49
21	56	137	115	96	137	123	45	46	54	57	50	41
22	62	140	118	103	142	120	43	47	52	100	65	41
23	68	139	123	95	142	120	43	46	50	48	46	46
24	75	150	114	88	139	119	41	346	49	47	84	44
25	75	142	110	84	138	151	39	267	48	50	51	36
26	83	139	107	92	138	169	40	94	47	53	43	36
27	90	142	119	98	142	162	40	48	45	70	40	42
28	91	135	120	100	146	136	39	42	43	54	42	38
29	97	130	117	97	---	120	39	35	42	53	50	38
30	115	133	111	100	---	121	38	37	39	54	50	35
31	116	---	110	99	---	120	---	52	---	57	50	---
TOTAL	2296	4105	3565	3132	3356	4323	1664	1828	1609	2600	1602	1752
MEAN	74.06	136.8	115.0	101.0	119.9	139.5	55.47	58.97	53.63	83.87	51.68	58.40
MAX	116	150	145	115	146	169	114	346	137	859	84	194
MIN	52	119	103	84	92	118	38	28	34	36	40	35
AC-FT	4550	8140	7070	6210	6660	8570	3300	3630	3190	5160	3180	3480

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2002, BY WATER YEAR (WY)

	84.57	105.8	95.23	103.0	109.7	117.8	138.3	284.2	191.7	109.8	153.3	78.04
MEAN	84.57	105.8	95.23	103.0	109.7	117.8	138.3	284.2	191.7	109.8	153.3	78.04
MAX	457	289	201	174	180	229	664	1599	1083	365	794	241
(WY)	1985	1985	2000	1996	2000	1998	1999	1999	1997	1985	1999	1999
MIN	0.81	5.77	30.0	19.0	35.2	20.0	3.36	0.96	8.39	4.34	3.87	0.000
(WY)	1976	1979	1977	1979	1978	1978	1975	1975	1978	1976	1974	1975

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1973 - 2002

ANNUAL TOTAL	47219	31832	
ANNUAL MEAN	129.4	87.21	130.4
HIGHEST ANNUAL MEAN			438
LOWEST ANNUAL MEAN			29.4
HIGHEST DAILY MEAN	815	Sep 1	11000
LOWEST DAILY MEAN	29	Jul 8	a0.00
ANNUAL SEVEN-DAY MINIMUM	38	Jul 3	31
MAXIMUM PEAK FLOW			2520
MAXIMUM PEAK STAGE			4.81
ANNUAL RUNOFF (AC-FT)	93660	63140	94500
10 PERCENT EXCEEDS	178	142	237
50 PERCENT EXCEEDS	123	75	87
90 PERCENT EXCEEDS	52	40	6.0

a No flow at times many years.
b From rating curve extended above 9,590 ft³/s.
c From floodmark.

07106300 FOUNTAIN CREEK NEAR PINON, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1976 to December 1983, December 1990 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1976 to September 1979.

WATER TEMPERATURE: October 1976 to September 1979.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L) AS CA (00915)	MAGNESIUM, DIS-SOLVED (MG/L) AS MG (00925)	FLUORIDE, DIS-SOLVED (MG/L) AS F (00950)	SULFATE, DIS-SOLVED (MG/L) AS SO4 (00945)	NITROGEN, AMMONIA SOLVED (MG/L) AS N (00608)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	ORTHO-PHOSPHATE, DIS-SOLVED (MG/L) AS P (00671)
OCT 29...	1045	95	9.3	8.4	1090	12.0	97.9	30.1	1.70	290	E.012	2.92	.53
DEC 10...	1115	116	10.9	8.3	1060	4.0	90.6	30.4	1.70	300	.109	3.91	.33
MAR 04...	1130	145	10.9	8.3	980	4.5	94.6	30.8	1.60	260	.111	4.28	.24
APR 15...	1130	40	8.3	8.4	1150	17.0	89.2	28.0	1.80	320	.015	2.66	.25
JUN 24...	1240	48	8.2	8.4	1120	27.0	89.6	27.8	1.90	380	E.010	2.37	.21
AUG 19...	1300	45	7.1	8.4	1100	26.5	85.3	27.5	1.70	290	<.015	2.28	.22

Date	PHOSPHORUS TOTAL (MG/L) AS P (00665)	OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L) (00310)	E COLI, MTEC MF (COL/100 ML) (31633)	COLIFORM, FECAL, UM-MF (COLS./100 ML) (31625)	ARSENIC DIS-SOLVED (UG/L) AS AS (01000)	ARSENIC TOTAL (UG/L) AS AS (01002)	BORON, DIS-SOLVED (UG/L) AS B (01020)	BORON, TOTAL RECOVERABLE (UG/L) AS B (01022)	CADMIUM DIS-SOLVED (UG/L) AS CD (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L) AS CD (01027)	CHROMIUM, DIS-SOLVED (UG/L) AS CR (01030)	CHROMIUM, TOTAL RECOVERABLE (UG/L) AS CR (01034)	COPPER, DIS-SOLVED (UG/L) AS CU (01040)
OCT 29...	.80	1.8	250	300	2.7	5	240	220	.13	.38	2.0	5	3.0
DEC 10...	.67	2.7	e40	e48	1.8	4	220	210	E.13	.34	<1.0	5	3.2
MAR 04...	1.2	7.6	e10	e53	2.8	6	230	230	--	.39	<1.0	7	--
APR 15...	.36	<2.0	e32	e15	2.1	3	210	230	<.10	.33	<1.0	2	5.8
JUN 24...	.42	<2.0	e140	280	2.6	4	210	220	E.10	.34	1.9	2	8.5
AUG 19...	.47	<2.0	520	940	3.0	4	250	250	.13	E.24	2.9	4	3.0

Date	COPPER, TOTAL RECOVERABLE (UG/L) AS CU (01042)	CYANIDE TOTAL (MG/L) AS CN (00720)	IRON, DIS-SOLVED (UG/L) AS FE (01046)	IRON, TOTAL RECOVERABLE (UG/L) AS FE (01045)	LEAD, DIS-SOLVED (UG/L) AS PB (01049)	LEAD, TOTAL RECOVERABLE (UG/L) AS PB (01051)	MANGANESE, DIS-SOLVED (UG/L) AS MN (01056)	MANGANESE, TOTAL RECOVERABLE (UG/L) AS MN (01055)	MERCURY DIS-SOLVED (UG/L) AS HG (71890)	MERCURY TOTAL RECOVERABLE (UG/L) AS HG (71900)	NICKEL, DIS-SOLVED (UG/L) AS NI (01065)	NICKEL, TOTAL RECOVERABLE (UG/L) AS NI (01067)	SELENIUM, DIS-SOLVED (UG/L) AS SE (01145)
OCT 29...	10	<.01	<10	4460	<.20	9.1	4	200	<.01	.01	6.3	10.4	8
DEC 10...	20	<.01	<10	3700	E.21	6.9	E5	180	<.01	.01	5.0	8.2	7
MAR 04...	20	<.01	--	9640	--	18	--	440	<.01	.03	7.8	12.5	4
APR 15...	10	<.01	<10	1310	.22	2.6	E3	60	<.01	<.01	7.7	7.8	--
JUN 24...	20	--	<10	3960	E.25	6.2	E2	180	<.01	.01	6.7	8.6	8
AUG 19...	10	--	<10	3840	<.20	6.2	E2	170	<.01	.01	8.0	9.6	7

e Estimated value.
 E Estimated laboratory analysis value.

ARKANSAS RIVER BASIN

07106300 FOUNTAIN CREEK NEAR PINON, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
OCT 29...	8	<.04	.10	10	40	317	81.4
DEC 10...	10	<.04	.11	E14	40	301	94.2
MAR 04...	8	<.04	.32	--	80	1000	392
APR 15...	9	<.04	.06	E8	E20	75	8.1
JUN 24...	7	<.04	.08	E10	40	170	22.0
AUG 19...	7	<.04	.07	E9	30	199	24.3

E Estimated laboratory analysis value.

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT					JAN				
02...	1135	75	1100	18.5	22...	0925	107	1080	.5
22...	1255	71	1150	16.0	FEB				
29...	1115	100	1010	13.5	06...	1215	110	1050	3.0
NOV					22...	1200	152	1020	7.0
06...	1110	141	1070	12.0	APR				
20...	1135	148	1060	8.0	02...	1345	94	1070	7.5
DEC					SEP				
12...	1140	116	1090	2.0	06...	1345	48	1120	26.0
28...	1255	131	1090	5.5					

07106300 FOUNTAIN CREEK NEAR PINON, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 2001 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published during period of operation are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.38 inches, May 5, 2001.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 0.51 inch, Sept. 12.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	---	---	---	---	---	0.00	0.02	0.00	0.00	0.02	0.00
3	0.00	---	---	---	---	---	0.00	0.00	0.33	0.00	0.00	0.00
4	0.00	---	---	---	---	---	0.00	0.00	0.09	0.00	0.00	0.00
5	0.04	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.02	0.00
7	0.00	---	---	---	---	---	0.01	0.00	0.00	0.00	0.00	0.02
8	0.00	---	---	---	---	---	0.00	0.05	0.00	0.00	0.00	0.00
9	0.03	---	---	---	---	---	0.00	0.00	0.00	0.37	0.00	0.04
10	0.00	---	---	---	---	---	0.00	0.00	0.00	0.25	0.00	0.24
11	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.08
12	0.00	---	---	---	---	---	0.00	0.09	0.00	0.00	0.00	0.51
13	0.00	---	---	---	---	---	0.00	0.00	0.00	---	0.00	0.00
14	0.00	---	---	---	---	---	0.00	0.00	0.00	---	0.00	0.01
15	0.00	---	---	---	---	---	0.00	0.00	0.00	---	0.00	0.00
16	0.00	---	---	---	---	---	0.00	0.35	0.02	0.00	0.00	0.00
17	0.00	---	---	---	---	---	0.00	0.02	0.00	0.00	0.00	0.00
18	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.48
19	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	---	---	---	---	---	0.01	0.00	0.00	0.00	0.00	0.01
21	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.03	0.00
22	0.00	---	---	---	---	---	0.01	0.00	0.01	0.27	0.00	0.00
23	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	---	---	---	---	---	0.00	0.07	0.00	0.00	0.00	0.00
25	0.00	---	---	---	---	---	0.00	0.01	0.45	0.00	0.00	0.00
26	0.00	---	---	---	---	---	0.00	0.00	0.00	0.03	0.00	0.00
27	0.00	---	---	---	---	---	0.00	0.00	0.00	0.01	0.00	0.00
28	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.04	0.00
29	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.17	0.00
30	0.01	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	0.08	---	---	---	---	---	0.03	0.61	0.90	---	0.28	1.39
MAX	0.04	---	---	---	---	---	0.01	0.35	0.45	---	0.17	0.51

07106500 FOUNTAIN CREEK AT PUEBLO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1981 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1985 to current year.
 WATER TEMPERATURE: December 1985 to current year.
 SUSPENDED SEDIMENT: May 2001 to current year (seasonal records only).

INSTRUMENTATION.--Water-quality monitor and pumping sediment sampler with satellite telemetry.

REMARKS.--Daily specific-conductance records are fair. Daily water-temperature records are fair. Daily suspended-sediment records are fair. Daily data that are not published are either missing or of unacceptable quality. Reported values for daily specific conductance and water temperature are representative of the stream during steady flows based on cross-section comparisons made during the year at flows between 42-127 ft³/s. Additional water-quality data were collected as part of a water-quality assessment of drought conditions and are published in the "Drought Synoptic Sampling" section of this report.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 3,460 microsiemens/cm, July 7, 1989; minimum, 162 microsiemens/cm, June 7, 1997.
 WATER TEMPERATURE: Maximum, 33.1°C, July 17, 1991; minimum, 0.0°C, on many days.
 SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 8,160 mg/L, July 10, 2001; minimum daily mean, 28 mg/L, Apr. 19, 24, 2002.
 SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 24,900 tons, July 6, 2002; minimum daily, 1.7 tons (estimated), July 8, 2001.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 2,890 microsiemens/cm, May 16; minimum, 488 microsiemens/cm, July 6.
 WATER TEMPERATURE: Maximum, 32.3°C, July 24; minimum, 0.0°C, on many days.
 SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 6,370 mg/L, Sept. 13; minimum daily mean, 28 mg/L, Apr. 19, 24.
 SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 24,900 tons, July 6; minimum daily, 2.1 tons, Apr. 24.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	
OCT	29...	0915	106	9.8	8.4	1290	9.5	109	42.8	1.90	390	E.014	2.82	.27
DEC	10...	0940	123	11.9	8.1	1220	1.5	97.4	39.0	1.90	350	.044	3.68	.21
MAR	04...	0915	131	12.2	8.3	1200	.0	101	37.1	1.70	340	.066	4.87	.29
APR	15...	0940	47	9.0	8.4	1400	12.0	101	44.4	2.00	370	.019	3.16	.17
JUN	24...	1030	34	7.4	8.4	1470	23.5	110	50.3	2.10	420	.016	2.78	.14
AUG	19...	1600	38	6.6	8.5	1430	28.0	104	48.1	2.00	460	E.009	2.05	.11

Date	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L) (00310)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	ARSENIC TOTAL (UG/L AS AS) (01002)	BORON, DIS-SOLVED (UG/L AS B) (01020)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	CADMIUM, DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	CHRO-MIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	
OCT	29...	.93	1.4	120	170	2.8	5	290	230	.11	.36	2.3	4	3.0
DEC	10...	.37	1.0	e20	e12	2.2	4	210	210	E.14	.29	E1.3	3	2.6
MAR	04...	.87	E1.6	<3	e9	2.2	4	240	240	E.16	.33	E1.3	5	3.0
APR	15...	.22	<2.0	e30	e13	2.2	3	220	230	<.10	.16	1.3	1	3.4
JUN	24...	.23	<2.0	300	290	2.9	3	230	220	<.10	.23	2.7	2	2.4
AUG	19...	.34	<2.0	320	410	3.4	4	260	260	.16	.37	3.0	4	2.5

e Estimated value.
 E Estimated laboratory analysis value.

ARKANSAS RIVER BASIN

07106500 FOUNTAIN CREEK AT PUEBLO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	CYANIDE TOTAL (MG/L AS CN) (00720)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)
OCT 29...	8.6	<.01	<10	3840	<.20	7	4	150	<.01	E.01	6.8	10	22
DEC 10...	8.6	<.01	<10	2100	<.20	4	E5	100	<.01	E.01	6.0	8	19
MAR 04...	10	<.01	<10	1750	E.21	8	E4	190	<.01	.01	7.5	10	17
APR 15...	4.6	<.01	<10	210	<.20	1	3	20	<.01	<.01	8.5	9	32
JUN 24...	5.4	--	<10	1550	<.20	2	<2	60	<.01	E.01	8.2	9	38
AUG 19...	9.9	--	<10	3540	<.20	5	E5	140	<.01	.01	9.0	10	31

Date	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (MG/L) (80155)
OCT 29...	22	<.04	.07	4	30	219	62.7
DEC 10...	22	<.04	.05	E6	E20	182	60.4
MAR 04...	17	<.04	.12	E13	40	353	125
APR 15...	32	<.04	<.04	<4	10	41	5.2
JUN 24...	35	<.04	<.04	<6	E10	72	6.6
AUG 19...	27	<.04	.05	<6	E20	184	18.9

e Estimated value.
E Estimated laboratory analysis value.

WATER-QUALITY DATA COLLECTED AS PART OF PREFERRED STORAGE OPTIONS PLAN, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD LAB (MG/L AS CACO3) (90410)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
JAN 09...	1405	135	9.8	8.4	1240	8.5	101	37.6	5.66	120	197	65.2	1.8
MAR 11...	1300	164	9.2	8.4	1140	12.0	86.9	31.8	6.51	109	185	61.2	1.8
MAY 21...	1230	33	7.3	8.4	1440	21.0	106	45.7	6.27	138	210	63.9	2.4

Date	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
JAN 09...	371
MAR 11...	319
MAY 21...	449

ARKANSAS RIVER BASIN

07106500 FOUNTAIN CREEK AT PUEBLO, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1320	1280	1300	1230	1190	1210	1140	1110	1130	1240	1160	1210
2	1340	1290	1320	1220	1170	1200	1140	1120	1130	1230	1180	1210
3	1340	1290	1300	1210	1150	1180	1150	1120	1130	1370	1200	1250
4	1330	1280	1300	1230	1180	1200	1160	1120	1140	1250	1200	1220
5	1340	1240	1280	1220	1140	1170	1170	1150	1160	1250	1210	1230
6	1240	1170	1200	1190	1140	1170	1190	1160	1170	1280	1220	1240
7	1210	1170	1180	1200	1180	1190	1200	1170	1190	1290	1220	1240
8	1290	1210	1280	1430	1160	1230	1210	1190	1200	1240	1190	1220
9	1300	1270	1280	1180	1160	1170	1220	1150	1200	1250	1210	1230
10	1320	1270	1290	1190	1170	1170	1230	1170	1200	1250	1210	1230
11	1300	1270	1280	1180	1160	1170	1230	1160	1200	1240	1140	1210
12	1340	1300	1310	1180	1150	1160	1220	1190	1210	1250	1180	1230
13	1320	1270	1290	1170	1140	1150	1260	1180	1210	1240	1210	1230
14	1310	1270	1280	1170	1150	1160	1240	1180	1210	1250	1180	1220
15	1300	1260	1280	1160	1150	1150	1230	1180	1200	1250	1170	1210
16	1310	1270	1290	1170	1130	1140	1230	1190	1200	1260	1180	1210
17	1320	1280	1300	1160	1130	1140	1230	1190	1210	1260	1190	1220
18	1340	1300	1330	1150	1110	1130	1220	1170	1190	1290	1200	1240
19	1320	1270	1290	1180	1110	1140	1200	1170	1190	1320	1200	1260
20	1300	1250	1280	1140	1100	1130	1210	1160	1200	1260	1200	1230
21	1330	1280	1320	1160	1140	1140	1200	1170	1180	1230	1180	1210
22	1360	1290	1330	1150	1120	1140	1240	1160	1180	1230	1190	1210
23	1380	1320	1350	1160	1120	1140	1240	1200	1230	1230	1200	1210
24	1360	1300	1330	1160	1100	1120	1260	1190	1220	1310	1210	1250
25	1330	1280	1300	1150	1100	1120	1230	1190	1210	1320	1220	1270
26	1320	1260	1280	1120	1090	1110	1220	1190	1200	1240	1220	1230
27	1330	1250	1270	1110	1080	1100	1210	1190	1200	1280	1210	1220
28	1300	1230	1260	1150	1100	1130	1230	1190	1210	1240	1210	1230
29	1250	1220	1240	1160	1130	1140	1240	1210	1230	1240	1210	1230
30	1220	1190	1200	1150	1130	1140	1230	1180	1210	1250	1190	1230
31	1220	1190	1190	---	---	---	1220	1180	1210	1220	1180	1200
MONTH	1380	1170	1280	1430	1080	1150	1260	1110	1190	1370	1140	1230
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1390	1200	1270	1160	1120	1130	1140	1120	1130	1420	1390	1410
2	1260	1190	1240	---	---	---	1160	1130	1150	1430	1370	1400
3	1280	1200	1230	---	---	---	1210	1160	1190	1390	1320	1370
4	1250	1190	1210	---	---	---	1220	1200	1210	1380	1370	1380
5	1230	1190	1210	1120	1100	1110	1220	1200	1220	1390	1370	1380
6	1220	1190	1210	1130	1100	1110	1230	1220	1220	1420	1360	1390
7	1280	1200	1230	1120	1100	1110	1260	1170	1230	1450	1370	1410
8	1230	1190	1210	1130	1110	1120	1240	1170	1210	1490	1430	1470
9	1230	1170	1200	1150	1060	1120	1250	1180	1220	1480	1400	1450
10	1290	1120	1210	1160	1100	1120	1260	1200	1240	1470	1400	1440
11	1260	1150	1200	1130	1100	1110	1250	1170	1220	1460	1400	1440
12	1210	1150	1180	1130	1110	1120	1280	1250	1270	1560	1410	1450
13	1250	1150	1190	1140	1110	1120	1330	1250	1290	1410	1280	1350
14	1190	1110	1160	1140	1090	1130	1330	1300	1320	1320	1270	1300
15	1190	1110	1140	1140	1110	1120	1380	1300	1350	1510	1320	1400
16	1170	1100	1130	1160	1110	1130	1410	1320	1360	2890	1180	1600
17	1160	1100	1140	1160	1130	1150	1440	1350	1390	1690	1300	1490
18	1480	1080	1160	1160	1120	1140	1440	1350	1400	1390	1240	1300
19	1250	1060	1130	1140	1130	1130	1480	1260	1360	1480	1380	1410
20	1120	1100	1110	1150	1130	1130	1390	1300	1350	1440	1340	1400
21	1110	1100	1110	1140	1120	1120	1470	1320	1360	1440	1350	1400
22	1140	1090	1110	1120	1110	1120	1380	1350	1370	1460	1410	1440
23	1140	990	1120	1130	1120	1120	1420	1350	1390	1450	1380	1420
24	1140	1100	1120	1130	1100	1110	1430	1290	1390	1500	832	1230
25	1140	1080	1100	1110	1060	1090	1430	1330	1400	1130	843	971
26	1100	1020	1090	1160	1040	1090	1420	1340	1400	1280	1130	1220
27	1160	1090	1130	1140	1090	1110	1430	1390	1400	1380	1280	1340
28	1160	1100	1120	1130	1090	1110	1440	1400	1420	1460	1380	1430
29	---	---	---	1130	1080	1120	1430	1390	1410	1550	1460	1490
30	---	---	---	1130	1120	1120	1420	1370	1400	1520	1460	1490
31	---	---	---	1220	1110	1140	---	---	---	1530	1440	1480
MONTH	1480	990	1170	---	---	---	1480	1120	1310	2890	832	1390

ARKANSAS RIVER BASIN

07106500 FOUNTAIN CREEK AT PUEBLO, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1460	1410	1430	1650	1540	1590	1390	1340	1360	1410	1350	1370
2	1470	1410	1440	1740	1640	1690	1420	1330	1370	1440	1350	1380
3	2350	1150	1430	1700	1450	1590	1420	1340	1380	1450	1340	1380
4	2430	995	1550	1460	1370	1420	1460	1340	1390	1400	1330	1350
5	1410	1280	1310	1460	1370	1410	1410	1340	1370	1390	1320	1350
6	1410	1300	1350	1420	488	962	1430	1330	1370	1400	1330	1360
7	1460	1410	1430	1110	709	882	1420	1350	1380	1430	1360	1380
8	1490	1390	1440	1320	1110	1220	1460	1360	1400	1450	1340	1390
9	1510	1410	1440	1530	1290	1360	1460	1380	1410	1420	1280	1350
10	1540	1370	1470	1580	1280	1470	1440	1370	1410	1380	930	1220
11	1580	1490	1550	1420	1120	1260	1490	1370	1410	1180	781	969
12	1610	1300	1510	1440	1150	1320	1480	1370	1420	1240	1120	1180
13	1400	1290	1350	---	---	---	1440	1320	1380	1310	790	929
14	1340	1280	1300	---	---	---	1360	1290	1320	1220	978	1130
15	1400	987	1210	---	---	---	1380	1310	1350	1360	1150	1250
16	1260	1080	1190	1610	1560	1590	1380	1340	1360	1460	1320	1390
17	1300	1250	1280	1600	1440	1540	1400	1330	1360	1500	1230	1420
18	1360	1300	1330	1440	1360	1400	1480	1340	1400	1440	1280	1390
19	1370	1320	1350	1420	1350	1370	1480	1380	1430	1860	1160	1400
20	1430	1320	1360	1410	1350	1380	1440	1360	1390	1430	1160	1300
21	1340	1310	1330	1440	1370	1400	1420	1350	1390	1390	1290	1350
22	1360	1310	1330	1770	1170	1430	1390	1220	1330	1460	1270	1370
23	1400	1320	1350	1400	1180	1290	1360	1230	1310	1340	1150	1310
24	1440	1330	1370	1430	1390	1410	1380	1050	1260	1390	1340	1360
25	1440	1330	1390	1440	1380	1400	1310	1100	1220	1420	1380	1400
26	1390	1320	1360	1430	1350	1380	1400	1270	1350	1440	1400	1420
27	1430	1390	1410	1360	1190	1310	1510	1400	1470	1400	1340	1380
28	1500	1430	1480	1310	1200	1270	2030	910	1490	1390	1340	1370
29	1520	1450	1490	1430	1310	1350	1720	557	1430	1400	1360	1370
30	1580	1490	1530	1410	1330	1370	1510	1270	1350	1420	1380	1390
31	---	---	---	1390	1340	1360	1410	1330	1370	---	---	---
MONTH	2430	987	1390	---	---	---	2030	557	1380	1860	781	1320

TEMPERATURE, WATER (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	22.8	13.5	18.1	---	---	---	6.3	0.5	3.1	2.2	0.4	1.4
2	23.8	13.0	17.6	14.4	7.2	10.7	7.0	1.7	4.2	2.6	0.4	1.5
3	21.8	12.2	16.5	13.4	7.3	10.5	6.0	2.7	4.3	2.1	0.4	1.0
4	21.2	11.5	15.7	12.7	7.9	10.4	8.2	1.7	4.8	3.3	0.5	1.7
5	14.5	10.5	12.4	13.6	7.6	11.0	7.7	2.4	4.9	3.4	0.6	2.3
6	19.1	8.2	13.3	15.3	7.1	11.0	7.0	0.4	3.4	4.3	0.5	2.2
7	19.4	9.3	14.2	15.7	7.3	11.2	5.4	2.8	4.1	4.8	0.7	2.8
8	19.7	10.9	15.1	9.5	5.8	7.8	3.7	0.7	2.7	7.4	2.6	4.6
9	17.9	11.4	14.0	13.4	5.5	8.9	4.8	0.0	2.6	6.8	4.0	5.1
10	15.7	8.7	12.3	12.3	4.1	8.1	4.7	2.8	3.6	7.3	4.3	5.5
11	16.5	7.1	11.7	12.6	4.6	8.3	4.2	0.2	3.0	6.1	2.8	4.6
12	14.7	8.1	10.9	16.0	5.7	9.5	3.1	0.7	1.9	6.1	2.1	4.4
13	16.3	5.4	10.5	12.1	7.0	9.6	3.2	0.0	1.2	7.4	2.0	4.2
14	17.3	6.6	11.7	14.3	8.1	10.7	4.4	0.1	2.0	5.0	1.8	3.3
15	15.0	6.4	10.5	13.4	6.6	9.8	4.2	0.2	2.1	3.8	2.1	2.8
16	16.9	5.9	10.9	13.5	7.1	10.2	3.8	0.8	2.5	3.3	1.2	2.2
17	16.5	7.4	11.8	13.5	7.8	10.2	4.2	0.6	2.1	3.8	1.2	2.1
18	16.3	8.7	11.8	12.0	7.0	9.0	4.1	1.8	3.4	---	---	---
19	17.1	7.2	11.4	11.5	5.9	8.1	4.0	0.2	2.2	---	---	---
20	17.4	8.2	11.7	10.6	3.5	6.9	2.8	0.0	1.7	---	---	---
21	---	---	---	9.9	2.4	6.2	3.0	0.6	1.9	---	---	---
22	---	---	---	9.5	4.9	7.0	3.0	2.2	2.6	---	---	---
23	---	---	---	8.0	4.4	7.0	3.0	1.1	2.0	3.2	0.0	1.3
24	---	---	---	8.0	2.0	5.1	2.5	0.4	1.7	3.2	0.0	0.9
25	---	---	---	6.9	2.6	5.4	2.4	0.2	1.5	5.1	0.0	1.6
26	---	---	---	6.6	1.7	3.9	2.8	1.3	1.8	3.8	1.7	2.8
27	---	---	---	5.0	0.9	2.7	2.6	1.5	2.1	---	---	---
28	---	---	---	3.9	0.0	1.3	5.2	1.7	3.1	---	---	---
29	---	---	---	4.2	0.0	1.6	5.0	1.1	2.5	---	---	---
30	---	---	---	6.4	0.7	3.1	2.4	0.1	1.3	---	---	---
31	---	---	---	---	---	---	3.3	0.4	1.6	---	---	---
MONTH	---	---	---	---	---	---	8.2	0.0	2.6	---	---	---

07106500 FOUNTAIN CREEK AT PUEBLO, CO--Continued

TEMPERATURE, WATER (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	3.3	0.0	0.5	16.4	6.0	11.1	22.5	8.1	13.8
2	---	---	---	2.2	0.0	0.4	9.4	3.7	6.2	21.4	8.0	13.4
3	---	---	---	4.6	0.0	1.2	14.7	1.8	7.5	23.1	8.4	14.9
4	---	---	---	8.5	0.0	3.2	15.8	2.6	8.9	22.7	9.3	15.5
5	---	---	---	10.9	0.0	4.8	15.6	4.1	10.3	25.9	9.7	16.6
6	---	---	---	12.5	1.5	6.5	16.5	6.6	11.2	25.8	9.2	16.8
7	7.9	0.0	3.1	12.7	1.8	6.8	12.1	7.3	9.9	25.6	10.7	17.1
8	9.1	0.5	3.9	12.4	0.9	5.8	19.2	6.4	12.0	21.0	10.1	13.7
9	3.1	0.0	0.7	9.1	0.3	3.7	20.1	8.1	13.6	21.8	7.8	13.9
10	5.5	0.0	1.6	11.9	0.4	5.6	19.8	8.1	12.7	24.5	7.8	15.3
11	5.5	0.0	2.0	14.7	3.7	8.6	21.2	8.8	13.9	23.7	9.1	15.2
12	6.1	0.0	2.1	14.5	3.5	8.7	18.0	7.7	12.6	17.2	10.1	12.7
13	6.7	0.0	2.2	15.8	5.0	9.7	22.3	8.2	14.5	22.5	7.2	14.3
14	4.5	0.0	1.8	14.7	4.5	8.3	21.7	8.0	14.4	17.3	9.4	12.8
15	7.7	0.0	2.9	10.2	3.2	5.7	22.3	9.7	15.3	22.4	10.7	15.3
16	8.0	0.0	3.3	12.3	1.9	6.6	18.2	10.7	13.8	24.4	11.4	16.2
17	9.4	0.1	4.8	12.1	1.1	6.4	19.7	9.3	13.8	19.6	11.9	14.5
18	9.4	2.1	6.0	12.2	1.9	7.0	19.1	8.9	13.3	25.8	11.1	17.1
19	11.5	4.3	6.7	13.9	3.8	8.3	18.5	7.5	12.1	21.0	11.9	16.0
20	10.2	1.6	5.4	14.3	1.9	7.9	11.5	6.7	9.3	24.9	11.9	17.3
21	9.7	1.5	5.3	8.3	1.4	4.4	16.8	3.3	9.5	21.9	12.0	16.3
22	10.8	0.1	5.2	10.5	0.0	5.0	19.4	4.5	11.5	25.3	8.0	16.0
23	11.2	3.0	6.8	13.6	1.9	7.4	22.1	5.5	13.0	23.7	9.8	15.5
24	11.0	3.3	6.9	7.9	3.5	5.5	20.3	7.4	12.6	14.2	10.5	12.1
25	5.6	0.2	2.6	7.8	1.5	4.5	18.5	6.0	11.3	21.4	8.5	14.2
26	4.3	0.0	1.2	13.8	2.0	7.5	18.4	7.5	12.8	23.4	10.8	16.8
27	6.0	0.0	2.2	15.5	3.4	9.0	20.1	8.8	13.7	24.9	11.4	17.1
28	8.0	0.0	3.3	16.1	4.8	10	22.9	8.0	14.1	27.3	11.1	18.2
29	---	---	---	15.3	4.8	9.8	20.3	9.1	14.0	26.9	12.2	18.9
30	---	---	---	17.0	4.2	10.4	22.4	8.9	14.8	29.3	13.5	20.7
31	---	---	---	16.8	5.2	10.8	---	---	---	28.8	14.4	20.8
MONTH	---	---	---	17.0	0.0	6.5	22.9	1.8	12.1	29.3	7.2	15.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	27.5	14.7	19.5	29.4	17.6	23.0	27.0	17.5	21.4	28.9	16.6	22.0
2	27.3	14.5	19.9	30.5	18.1	23.1	27.7	15.6	20.8	27.6	16.1	21.1
3	26.9	13.8	19.4	29.4	17.6	22.7	28.8	17.6	22.0	26.6	16.4	20.4
4	17.4	14.5	15.8	31.4	18.2	23.1	30.7	18.1	22.8	26.2	17.1	20.4
5	26.1	12.3	18.6	30.5	18.2	23.3	30.2	18.4	23.1	28.8	14.4	20.7
6	28.1	13.3	20.1	25.9	18.1	21.7	30.2	17.3	22.6	28.5	15.5	20.9
7	30.0	14.1	21.4	24.0	20.4	22.1	31.0	16.7	22.7	29.3	15.9	21.4
8	29.3	14.7	20.9	28.1	20.2	23.3	30.1	17.5	22.7	29.5	16.7	22.0
9	29.6	14.5	21.3	31.1	19.2	23.4	30.0	16.4	22.4	25.8	17.5	20.5
10	28.0	14.5	20.6	29.6	17.5	22.3	25.2	17.1	21.4	21.2	16.2	18.2
11	29.2	14.1	20.9	29.6	17.0	23.1	27.9	19.6	22.6	19.0	15.5	17.8
12	29.8	17.5	22.5	30.3	18.6	23.8	28.8	15.5	21.8	23.7	17.4	19.8
13	26.7	16.7	21.2	---	---	---	26.8	15.7	20.6	22.7	13.4	18.6
14	28.7	16.4	21.3	---	---	---	28.8	14.5	21.1	21.8	15.3	17.9
15	25.8	15.4	19.7	---	---	---	27.7	14.7	20.8	21.0	15.0	17.6
16	27.5	14.6	20.1	31.1	17.0	23.3	30.0	16.9	22.3	24.9	12.7	18.0
17	29.1	14.2	21.0	31.7	17.6	24.0	26.5	14.1	19.7	26.1	12.7	18.4
18	29.4	14.8	21.3	31.4	17.5	23.8	27.0	14.5	20.2	18.9	13.6	15.7
19	29.9	14.3	21.4	32.0	17.3	23.9	29.2	14.9	20.9	21.9	13.2	16.8
20	27.5	16.9	20.4	32.0	17.9	23.9	29.5	17.2	21.9	20.8	13.6	17.0
21	29.1	15.0	21.0	30.3	18.6	23.4	27.8	17.5	21.2	21.7	13.1	16.9
22	29.3	17.5	22.4	29.0	19.8	23.3	24.9	17.4	20.9	21.5	13.2	16.9
23	27.2	16.7	21.2	30.2	19.8	23.9	27.5	15.8	20.9	22.9	11.3	16.8
24	28.7	15.7	21.5	32.3	17.7	24.1	26.1	17.1	21.3	24.5	11.4	17.1
25	29.6	16.2	20.8	30.9	18.0	23.7	25.5	18.9	21.5	23.0	11.3	16.2
26	30.5	15.7	21.7	31.8	17.5	22.9	30.0	17.3	22.8	22.3	12.3	16.2
27	29.7	15.9	21.7	28.8	17.9	22.2	26.7	18.2	20.9	21.0	11.0	15.3
28	30.9	16.0	21.9	29.2	17.8	22.6	28.9	17.4	20.9	24.3	13.1	17.1
29	31.3	15.9	23.1	30.9	16.9	22.7	28.5	15.8	20.2	23.1	11.8	16.7
30	30.1	17.3	23.0	30.5	17.2	23.4	28.0	15.3	20.7	24.1	10.6	16.5
31	---	---	---	31.7	17.3	24.0	27.0	16.8	21.2	---	---	---
MONTH	31.3	12.3	20.9	---	---	---	31.0	14.1	21.5	29.5	10.6	18.4

ARKANSAS RIVER BASIN

07106500 FOUNTAIN CREEK AT PUEBLO, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT					
02...	1500	64	23.5	100	17.3
22...	1400	62	17.5	53	8.9
29...	0915	106	9.5	219	62.7
NOV					
06...	1320	168	15.0	443	201
DEC					
10...	0940	123	1.5	182	60.4
JAN					
22...	1400	127	7.0	290	99.4
MAR					
04...	0915	131	.0	353	125
APR					
03...	1330	103	13.0	139	38.7
15...	0940	47	12.0	41	5.2
MAY					
13...	0930	54	11.5	274	39.9
JUN					
24...	1030	34	23.5	72	6.6
JUL					
06...	1800	753	26.0	5170	10500
AUG					
19...	1600	38	28.0	184	18.9
SEP					
10...	1530	86	20.5	2330	541
11...	0845	250	16.0	3170	2140

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	70	78	15.0	140	---	---	174	---	---
2	68	98	18.0	152	---	---	171	---	---
3	78	122	26.0	153	---	---	175	---	---
4	74	---	e26	162	---	---	160	---	---
5	88	130	31.0	173	---	---	153	---	---
6	97	152	39.0	192	---	---	126	---	---
7	95	211	54.0	176	---	---	117	---	---
8	87	186	44.0	208	---	---	132	---	---
9	79	---	e31	200	---	---	133	---	---
10	74	113	23.0	197	---	---	124	---	---
11	66	91	16.0	180	---	---	133	---	---
12	56	100	15.0	180	---	---	118	---	---
13	62	141	23.0	178	---	---	117	---	---
14	62	---	e23	181	---	---	114	---	---
15	63	111	19.0	179	---	---	121	---	---
16	64	79	14.0	187	---	---	117	---	---
17	58	63	9.7	186	---	---	114	---	---
18	57	49	7.4	181	---	---	119	---	---
19	59	---	e7.2	176	---	---	110	---	---
20	56	46	7.0	171	---	---	123	---	---
21	58	---	e7.3	191	---	---	113	---	---
22	66	54	9.5	169	---	---	118	---	---
23	69	98	18.0	187	---	---	116	---	---
24	83	---	e29	189	---	---	128	---	---
25	73	120	23.0	173	---	---	131	---	---
26	75	117	24.0	174	---	---	110	---	---
27	91	226	54.0	178	---	---	122	---	---
28	96	269	68.0	177	---	---	113	---	---
29	106	240	67.0	162	---	---	124	---	---
30	122	---	e99	169	---	---	111	---	---
31	126	361	121	---	---	---	127	---	---
TOTAL	2378	---	968.1	5321	---	---	3964	---	---

e Estimated.

07106500 FOUNTAIN CREEK AT PUEBLO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	JANUARY			FEBRUARY			MARCH		
1	120	---	---	115	---	---	136	---	---
2	131	---	---	132	---	---	e150	---	---
3	125	---	---	124	---	---	128	---	---
4	115	---	---	130	---	---	140	---	---
5	120	---	---	126	---	---	146	---	---
6	113	---	---	117	---	---	160	---	---
7	126	---	---	130	---	---	138	---	---
8	122	---	---	124	---	---	135	---	---
9	120	---	---	115	---	---	145	---	---
10	139	---	---	109	---	---	144	---	---
11	138	---	---	111	---	---	158	---	---
12	126	---	---	117	---	---	148	---	---
13	136	---	---	119	---	---	134	---	---
14	127	---	---	116	---	---	148	---	---
15	126	---	---	135	---	---	143	---	---
16	135	---	---	147	---	---	145	---	---
17	114	---	---	119	---	---	151	---	---
18	99	---	---	138	---	---	164	---	---
19	96	---	---	132	---	---	142	---	---
20	109	---	---	127	---	---	141	---	---
21	115	---	---	129	---	---	164	---	---
22	121	---	---	137	---	---	147	---	---
23	135	---	---	138	---	---	147	---	---
24	115	---	---	130	---	---	143	---	---
25	109	---	---	133	---	---	173	---	---
26	110	---	---	140	---	---	208	---	---
27	121	---	---	136	---	---	184	---	---
28	119	---	---	135	---	---	172	---	---
29	110	---	---	---	---	---	144	---	---
30	129	---	---	---	---	---	153	---	---
31	128	---	---	---	---	---	146	---	---
TOTAL	3749	---	---	3561	---	---	4677	---	---

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	APRIL			MAY			JUNE		
1	138	248	92.0	44	---	e7.4	57	126	19.0
2	104	159	45.0	45	61	7.4	52	---	e16.0
3	99	115	31.0	38	---	e6.0	50	198	44.0
4	76	79	16.0	36	80	8.1	62	666	113
5	66	93	17.0	35	163	15.0	67	421	78.0
6	81	109	24.0	38	295	30.0	53	219	33.0
7	90	100	24.0	43	133	16.0	53	---	e18.0
8	99	---	e20.0	31	---	e3.7	56	104	16.0
9	81	66	14.0	36	45	4.4	39	80	8.5
10	73	85	17.0	36	35	3.4	28	---	e5.3
11	71	90	17.0	39	37	3.9	23	64	4.0
12	82	72	16.0	40	54	5.8	29	214	28.0
13	69	---	e11.0	56	331	56.0	47	---	e68.0
14	49	51	6.7	48	195	26.0	74	457	91.0
15	48	44	5.7	44	---	e15.0	128	1210	535
16	43	52	6.1	54	241	50.0	106	668	207
17	39	41	4.4	57	340	59.0	62	276	46.0
18	37	---	e2.9	93	---	e179	59	---	e29.0
19	36	28	2.7	42	104	12.0	59	133	21.0
20	43	38	4.3	43	73	8.5	59	143	23.0
21	40	46	5.0	38	76	7.8	54	---	e27.0
22	38	43	4.5	38	106	11.0	55	---	e35.0
23	40	---	e3.3	35	---	e10.0	58	---	e44.0
24	28	28	2.1	236	2710	4200	45	149	20.0
25	33	53	4.9	229	1900	1550	40	98	14.0
26	40	---	e9.7	47	---	e20.0	56	---	e72.0
27	38	---	e13.0	46	---	e16.0	37	---	e23.0
28	36	---	e10.0	50	---	e16.0	36	---	e20.0
29	39	64	6.7	33	---	e9.3	29	---	e15.0
30	52	---	e8.9	33	105	9.2	20	---	e9.7
31	---	---	---	50	141	19.0	---	---	---
TOTAL	1808	---	444.9	1733	---	6384.9	1593	---	1682.5

e Estimated.

ARKANSAS RIVER BASIN

07106500 FOUNTAIN CREEK AT PUEBLO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT
	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)
	JULY			AUGUST			SEPTEMBER		
1	15	---	e6.6	35	---	e15.0	32	432	38.0
2	e14	---	e5.8	43	---	e18.0	30	271	22.0
3	17	---	e6.3	42	---	e17.0	36	---	e25.0
4	46	123	15.0	37	---	e15.0	40	---	e28.0
5	41	---	e12.0	44	---	e17.0	34	---	e24.0
6	983	5850	24900	45	---	e18.0	40	227	25.0
7	297	3030	2770	44	---	e17.0	45	188	23.0
8	79	---	e359	42	---	e17.0	30	353	28.0
9	58	371	59.0	30	---	e12.0	36	686	70.0
10	54	217	31.0	30	146	12.0	106	2110	813
11	73	136	27.0	27	191	14.0	187	3160	2200
12	46	---	e15.0	29	---	e13.0	46	---	e83.0
13	e40	---	e9.6	31	133	11.0	254	6370	5130
14	e35	---	e9.0	29	141	11.0	81	1420	362
15	e25	---	e8.2	35	127	12.0	30	---	e22.0
16	18	---	e7.7	46	---	e16.0	22	125	7.4
17	20	170	9.1	37	---	e14.0	28	196	15.0
18	43	---	e28.0	35	---	e14.0	32	---	e35.0
19	46	269	33.0	34	157	15.0	52	---	e89.0
20	41	220	25.0	34	152	14.0	42	607	71.0
21	41	156	17.0	33	---	e14.0	34	256	23.0
22	105	349	112	49	434	67.0	38	270	28.0
23	52	---	e20.0	44	365	43.0	46	222	28.0
24	35	---	e14.0	83	2820	1040	34	---	e14.0
25	38	---	e15.0	58	3830	617	33	113	9.9
26	38	119	12.0	36	---	e134	30	177	14.0
27	48	477	83.0	22	185	11.0	42	411	48.0
28	71	---	e142	23	432	37.0	63	---	e68.0
29	62	---	e58.0	100	4970	4530	55	---	e46.0
30	42	---	e20.0	48	3200	519	39	---	e23.0
31	36	---	e15.0	28	---	e101	---	---	---
TOTAL	2559	---	28844.3	1253	---	7405.0	1617	---	9412.3

e Estimated.

07108900 ST. CHARLES RIVER AT VINELAND, CO

LOCATION.--Lat 38°14'44", long 104°29'09", in NE¹/₄SW¹/₄ sec.6, T.21 S., R.63 W., Pueblo County, Hydrologic Unit 11020002, on left bank at left downstream end of downstream bridge on U.S. Highway 50 Business, 1.6 mi west of Vineland, and 3.0 mi upstream from mouth.

DRAINAGE AREA.--474 mi².

PERIOD OF RECORD.--October 1978 to current year. Records for October 1967 to September 1974 (discharge measurements only prior to March 1968), published as St. Charles River near Vineland (station 07108800) at site 2.6 mi upstream, are not equivalent because of tributary inflow.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Datum of gage is 4,581.58 ft above sea level, (Colorado Division of Highways benchmark). Prior to May 10, 2001, on right bank at same datum.

REMARKS.--Records good except for Sept. 14 and estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoir, diversions for irrigation and industrial use, ground-water withdrawals, and return flows from irrigated areas. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1901, 56,000 ft³/s, June 3, 1921, gage height unknown, at site 5.0 mi upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.7	9.6	7.6	e7.6	e7.0	e7.0	6.8	3.7	2.6	0.94	1.9	2.2
2	7.1	9.6	7.1	e7.4	e7.2	e6.5	6.4	4.6	2.6	0.92	2.0	1.3
3	6.2	9.7	7.3	e7.4	e7.2	e6.8	7.1	4.0	2.5	0.86	1.7	1.4
4	5.9	9.7	7.2	7.7	e7.2	e7.2	6.2	4.3	2.9	0.86	1.5	1.5
5	6.6	8.8	7.1	7.7	e6.8	7.6	6.1	4.1	3.0	1.2	2.3	1.4
6	7.6	10	7.6	7.8	e6.4	7.4	5.9	3.4	3.2	1.8	2.2	1.4
7	7.4	6.7	7.6	7.3	6.3	8.0	6.8	3.5	2.3	2.0	3.0	1.6
8	7.0	7.0	8.6	7.9	7.4	8.5	5.7	3.7	1.8	1.5	1.5	1.4
9	6.1	7.0	8.3	7.9	6.1	8.1	4.8	4.0	1.6	3.1	1.0	3.1
10	5.6	8.5	7.9	8.1	e6.3	7.8	5.5	3.9	1.6	3.4	0.73	4.8
11	6.5	10	7.7	8.8	6.5	7.7	4.6	3.5	1.9	2.9	0.75	5.8
12	7.6	12	e7.7	8.1	6.4	7.1	4.3	4.0	2.1	1.2	0.68	5.0
13	8.1	12	e7.4	7.5	e6.2	7.3	4.8	3.6	1.9	0.81	0.85	3.9
14	9.9	12	e7.6	7.0	5.8	7.2	5.9	3.1	2.0	0.92	0.93	130
15	8.8	13	7.5	e6.8	6.3	10	4.8	2.9	1.0	1.1	0.80	14
16	9.2	9.7	7.9	e6.2	7.2	8.0	4.2	3.1	1.2	1.2	0.82	5.5
17	9.3	8.9	7.5	e6.4	7.0	6.9	4.7	3.0	2.0	1.5	0.66	4.6
18	8.9	8.2	7.8	e6.4	7.1	7.7	4.4	2.1	1.7	2.3	0.66	5.0
19	9.5	8.6	7.7	e6.4	7.6	7.3	4.5	1.3	2.9	1.3	0.61	3.9
20	11	8.5	8.1	e6.5	7.4	7.0	5.2	1.3	3.7	1.0	0.70	4.3
21	9.7	8.9	7.8	6.7	8.5	7.2	4.6	1.6	3.1	2.3	0.70	2.9
22	11	8.8	8.4	6.5	8.5	7.3	4.0	2.2	3.0	3.1	0.71	4.0
23	9.5	8.2	e8.0	6.9	8.8	6.7	4.0	2.9	2.0	2.8	1.0	4.0
24	9.3	8.9	e7.8	e7.2	7.9	6.0	3.8	4.2	1.9	2.7	1.1	4.7
25	9.0	8.4	e7.6	e8.0	7.8	6.0	4.0	3.9	1.7	2.4	0.95	4.4
26	8.8	8.1	e8.0	9.1	e7.0	5.8	4.4	2.5	1.8	1.9	1.3	3.3
27	9.1	8.2	8.4	8.5	e7.2	5.7	4.1	1.7	1.6	1.1	1.5	3.6
28	9.5	e7.8	8.6	8.0	e7.5	5.9	3.6	3.0	1.6	1.7	1.2	3.4
29	8.8	e8.0	8.4	9.1	---	6.4	4.4	3.1	0.78	2.2	1.2	4.3
30	9.1	7.9	8.2	e8.5	---	6.5	4.2	3.1	0.69	2.9	19	4.6
31	9.6	---	8.0	e8.0	---	6.8	---	3.0	---	2.4	8.7	---
TOTAL	258.4	272.7	242.4	233.4	198.6	221.4	149.8	98.3	62.67	56.31	62.65	241.3
MEAN	8.335	9.090	7.819	7.529	7.093	7.142	4.993	3.171	2.089	1.816	2.021	8.043
MAX	11	13	8.6	9.1	8.8	10	7.1	4.6	3.7	3.4	19	130
MIN	5.6	6.7	7.1	6.2	5.8	5.7	3.6	1.3	0.69	0.81	0.61	1.3
AC-FT	513	541	481	463	394	439	297	195	124	112	124	479

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2002, BY WATER YEAR (WY)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	
MEAN	14.56	16.10	12.99	12.76	13.37	21.39	68.14	156.6	78.27	35.50	44.56	19.18													
MAX	39.5	32.3	24.3	22.6	25.1	127	306	484	358	108	207	120													
(WY)	1983	1999	1998	1998	1998	1998	1987	1980	1983	1995	1982	1982													
MIN	3.50	5.59	6.81	6.75	7.09	6.71	4.99	3.17	2.07	1.82	2.01	6.36													
(WY)	1979	1979	1981	1981	2002	1995	2002	2002	2002	2002	2002	1980													

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1979 - 2002
ANNUAL TOTAL	5946.9	2097.93	
ANNUAL MEAN	16.29	5.748	41.28
HIGHEST ANNUAL MEAN			88.4
LOWEST ANNUAL MEAN			5.74
HIGHEST DAILY MEAN	776	Jul 14	3150
LOWEST DAILY MEAN	5.4	Apr 4	0.25
ANNUAL SEVEN-DAY MINIMUM	5.8	Apr 14	0.69
MAXIMUM PEAK FLOW		790	a7560
MAXIMUM PEAK STAGE		b5.92	c12.70
ANNUAL RUNOFF (AC-FT)	11800	4160	29900
10 PERCENT EXCEEDS	22	8.8	90
50 PERCENT EXCEEDS	9.0	6.1	14
90 PERCENT EXCEEDS	6.6	1.3	6.4

e Estimated.
a From rating curve extended above 1,750 ft³/s.
b From floodmarks.
c Maximum gage height, 13.68 ft, Apr 30, 1999.

ARKANSAS RIVER BASIN

07109500 ARKANSAS RIVER NEAR AVONDALE, CO

LOCATION.--Lat 38°14'53", long 104°23'55", in NE¹/₄SW¹/₄ sec.1, T.21 S., R.63 W., Pueblo County, Hydrologic Unit 11020002, on right bank 15 ft downstream from bridge on Sixmile Road, 0.3 mi upstream from Sixmile Creek, and 2.6 mi west of Avondale.

DRAINAGE AREA.--6,327 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1939 to September 1951, February 1965 to current year. Statistical summary computed for 1975 to current year, subsequent to partial regulation by Pueblo Reservoir.

REVISED RECORDS.--WSP 1087: 1942. WSP 1311: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 4,509.53 ft above sea level. Prior to Feb. 1, 1965, at site 550 ft downstream at datum 0.37 ft lower. Feb. 1, 1965 to Sept. 30, 1991, at datum 1.00 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are fair. Natural flow of stream affected by transbasin and transmountain diversions, storage reservoirs, power development, ground-water withdrawals, diversions for irrigation and municipal use, return flows from irrigated areas, and flows from sewage-treatment plants. Flow partly regulated by Pueblo Reservoir (station 07099350) 21 mi upstream since Jan. 9, 1974.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	214	406	324	303	e320	353	377	192	219	363	151	106
2	211	416	319	e300	e325	349	420	190	306	353	148	93
3	214	398	318	e300	e330	342	463	204	399	350	137	88
4	213	391	327	313	332	346	453	496	600	359	127	88
5	253	393	312	315	321	343	456	644	703	370	133	93
6	293	412	309	314	316	336	458	597	708	674	120	90
7	288	469	295	309	315	331	454	627	634	899	127	87
8	289	571	291	314	312	323	468	628	613	750	124	91
9	407	667	290	324	314	309	468	673	810	666	120	91
10	453	597	295	339	313	301	387	701	830	396	118	112
11	438	539	300	344	312	296	386	647	601	281	111	258
12	428	486	303	338	320	292	380	613	395	269	107	181
13	449	421	299	331	326	280	381	582	407	256	113	253
14	446	364	296	324	325	389	353	527	286	275	120	366
15	453	331	300	324	342	393	295	344	246	200	119	192
16	493	290	303	326	365	385	219	258	271	319	111	157
17	485	298	297	331	373	396	209	320	250	308	103	146
18	470	290	305	326	371	420	197	317	226	299	100	143
19	456	302	304	326	379	405	189	366	235	314	95	156
20	328	304	298	327	359	846	214	330	261	317	100	155
21	264	292	294	329	339	399	261	301	283	318	102	125
22	272	302	303	335	335	345	248	440	394	345	113	120
23	320	306	300	330	338	329	227	441	375	321	129	120
24	356	316	300	327	334	324	229	446	368	277	110	119
25	390	317	291	321	350	342	245	734	384	308	149	115
26	400	310	281	315	356	392	271	730	394	286	114	110
27	359	324	284	315	346	419	251	714	390	211	106	117
28	355	329	292	317	351	439	209	474	389	233	98	125
29	377	317	292	316	---	410	193	295	415	220	108	120
30	371	318	300	321	---	328	191	246	399	197	176	114
31	379	---	300	e320	---	325	---	182	---	181	130	---
TOTAL	11124	11476	9322	9974	9419	11487	9552	14259	12791	10915	3719	4131
MEAN	358.8	382.5	300.7	321.7	336.4	370.5	318.4	460.0	426.4	352.1	120.0	137.7
MAX	493	667	327	344	379	846	468	734	830	899	176	366
MIN	211	290	281	300	312	280	189	182	219	181	95	87
AC-FT	22060	22760	18490	19780	18680	22780	18950	28280	25370	21650	7380	8190

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2002, BY WATER YEAR (WY)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	525.6	476.0	360.7	381.9	419.3	542.4	858.1	1622	2618	1826	1306	619.1																
MAX	1631	985	718	770	1103	994	1884	4170	4971	4432	3210	1511																
(WY)	1985	1985	1987	1985	1985	1985	1987	1980	1997	1995	1984	1982																
MIN	187	170	197	190	223	219	220	460	426	352	120	138																
(WY)	1979	1979	1979	1979	1979	1978	1978	2002	2002	2002	2002	2002																

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1975 - 2002

ANNUAL TOTAL	278868	118169	
ANNUAL MEAN	764.0	323.8	a965.1
HIGHEST ANNUAL MEAN			1626
LOWEST ANNUAL MEAN			324
HIGHEST DAILY MEAN	3160	May 20	899 Jul 7
LOWEST DAILY MEAN	211	Oct 2	87 Sep 7
ANNUAL SEVEN-DAY MINIMUM	219	Sep 28	90 Sep 3
MAXIMUM PEAK FLOW			1270 Jul 6
MAXIMUM PEAK STAGE			2.73 Jul 6
ANNUAL RUNOFF (AC-FT)	553100	234400	699200
10 PERCENT EXCEEDS	1690	469	2200
50 PERCENT EXCEEDS	465	317	589
90 PERCENT EXCEEDS	300	120	273

- e Estimated.
- a Average discharge for 20 years (water years 1940-51, 1966-73), 867 ft³/s; 628,100 acre-ft/yr, prior to completion of Pueblo Dam.
- b Minimum daily discharge for period of record, 50 ft³/s, Apr 2, 1940.
- c From rating curve extended above 11,500 ft³/s on basis of velocity-area study. Maximum discharge and stage for period of record, about 50,000 ft³/s, June 18, 1965, gage height, 9.77 ft, datum then in use, from rating curve extended above 6,700 ft³/s, on basis of records for station near Pueblo and indirect measurements of peak flow on Fountain Creek at Pueblo, Chico Creek near North Avondale, and Arkansas River near Avondale.
- d From floodmark.

07109500 ARKANSAS RIVER NEAR AVONDALE, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April to September 1976, April 1979 to September 1980, December 1985 to current year.

PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: July 1979 to September 1980, August 1988 to current year.
 pH: July 1979 to September 1980, September 1988 to current year.
 SPECIFIC CONDUCTANCE: July 1979 to September 1980, December 1985 to current year.
 WATER TEMPERATURE: July 1979 to September 1980, December 1985 to current year.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry.

REMARKS.--Daily dissolved-oxygen records are poor. Daily pH records are fair except for Feb. 21-27, and July 30 to Aug. 1, which are poor. Daily specific-conductance records are good except for Jan. 3, Mar. 1-4, and July 30 to Aug. 1, which are fair. Daily water-temperature records are good. Daily data that are not published are either missing or of unacceptable quality. Reported values are representative of the stream during steady flows based on a cross-section comparison made during the year at a flow of 92 ft³/s. Daily mean pH records are available from the district office. Additional water-quality data were collected as part of a water-quality assessment of drought conditions and are published in the "Drought Synoptic Sampling" section of this report.

EXTREMES FOR PERIOD OF RECORD.--

DISSOLVED OXYGEN: Maximum, 14.0 mg/L, Feb. 16, 1996; minimum, 2.6 mg/L, July 14, 1992.
 pH: Maximum, 9.2 units, Apr. 19, 2002; minimum, 7.2 units, on many days in 1992, 1995-96.
 SPECIFIC CONDUCTANCE: Maximum, 1,800 microsiemens/cm, Sept. 14, 2002; minimum, 246 microsiemens/cm, June 16, 1980.
 WATER TEMPERATURE: Maximum, 31.5°C, Aug. 6, 1980; minimum, 0.0°C, on many days.

EXTREMES FOR CURRENT YEAR.--

DISSOLVED OXYGEN: Maximum, 13.8 mg/L, Aug. 10; minimum, 3.7 mg/L, July 6, Aug. 24.
 pH: Maximum, 9.2 units, Apr. 19; minimum, 7.5 units, July 6.
 SPECIFIC CONDUCTANCE: Maximum, 1,800 microsiemens/cm, Sept. 14; minimum, 696 microsiemens/cm, June 10.
 WATER TEMPERATURE: Maximum, 30.7° C, Aug. 11; minimum, 0.0° C, on many days.

WATER-QUALITY DATA COLLECTED AS PART OF PREFERRED STORAGE OPTIONS PLAN, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
JAN													
09...	1530	321	11.6	8.5	1040	7.0	106	36.4	4.45	74.4	165	33.5	1.3
MAR													
11...	1600	294	10.3	8.3	1080	13.5	101	37.3	4.84	80.5	164	36.0	1.2
MAY													
21...	1350	289	8.3	8.3	935	19.5	87.0	32.9	3.80	61.8	150	24.4	1.1
JUL													
24...	1130	276	7.5	8.1	912	25.0	80.5	31.9	4.31	58.9	--	24.3	.8

Date	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
JAN	
09...	350
MAR	
11...	358
MAY	
21...	296
JUL	
24...	293

ARKANSAS RIVER BASIN

07109500 ARKANSAS RIVER NEAR AVONDALE, CO--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	9.6	5.6	7.3	10.7	6.7	8.4	12.2	9.5	10.8	12.2	9.1	10.3
2	9.0	5.4	7.2	10.7	7.2	8.5	12.0	9.1	10.5	12.4	9.1	10.6
3	9.2	5.4	6.9	11.0	7.4	8.8	12.0	9.3	10.3	11.9	9.6	10.4
4	9.3	5.3	6.9	11.1	7.4	8.8	11.7	8.8	10.1	11.9	9.1	10.4
5	9.1	5.6	6.9	11.1	7.3	8.7	11.9	9.0	10	11.9	9.0	10.2
6	8.9	5.8	7.1	10.8	7.1	8.5	12.0	8.8	10.3	12.4	9.3	10.7
7	9.4	5.8	7.4	10.4	7.4	8.5	11.9	9.1	10.2	12.8	9.3	10.8
8	9.6	5.5	7.3	9.1	7.6	8.4	12.8	9.7	11.0	12.3	8.3	10.0
9	8.3	5.6	7.2	9.3	7.7	8.7	12.7	9.1	11.0	11.9	8.5	9.9
10	9.4	7.4	8.3	9.5	7.7	8.5	12.6	9.4	10.8	11.9	8.5	9.8
11	9.4	7.2	8.2	9.6	7.6	8.5	12.4	9.4	10.7	12.3	9.1	10.5
12	9.5	7.3	8.2	9.6	7.7	8.6	12.7	9.8	11.0	12.1	8.7	10.3
13	9.5	7.3	8.4	9.5	7.9	8.5	12.7	9.7	10.7	12.0	8.9	10.2
14	9.5	6.9	8.2	9.3	7.6	8.4	12.2	9.1	10.3	12.6	9.5	10.7
15	9.8	7.2	8.3	9.6	7.6	8.4	12.2	9.4	10.6	12.4	9.3	10.8
16	9.7	7.8	8.6	9.6	7.3	8.4	12.8	9.6	10.9	12.3	8.7	10.3
17	10.0	7.6	8.7	9.3	7.2	8.1	12.9	9.3	10.8	12.0	8.6	10.1
18	10.0	7.7	8.6	9.9	7.6	8.6	12.5	9.3	10.5	12.0	8.5	9.8
19	10.1	7.6	8.7	10.6	7.8	9.0	12.9	9.4	10.9	12.0	8.4	9.8
20	9.6	6.9	8.3	10.4	7.7	8.9	12.7	9.5	10.8	12.1	8.3	9.8
21	10.0	7.0	8.3	11.4	8.1	9.4	12.8	9.5	10.9	12.5	8.7	10.0
22	10.1	6.8	8.3	11.0	7.8	9.3	12.7	9.6	10.9	12.2	9.1	10.3
23	10.6	7.0	8.4	10.5	7.9	9.2	13.5	9.4	11.1	12.6	9.3	10.8
24	11.1	7.6	9.0	11.4	8.7	9.9	12.7	8.7	10.8	12.1	8.6	10.0
25	11.2	7.8	9.2	11.3	8.9	9.8	12.5	8.8	10.4	12.7	8.3	10.1
26	11.3	7.8	9.2	11.6	9.0	10	13.0	9.1	10.6	12.2	8.2	9.9
27	11.2	7.2	9.0	11.7	9.2	10.3	12.3	8.9	10.6	12.2	8.7	10.1
28	10.9	6.7	8.5	12.7	10.1	11.2	12.0	8.9	10.3	12.1	8.9	10.4
29	11.2	7.0	8.6	12.3	9.6	10.7	12.2	9.2	10.4	11.8	8.3	9.8
30	11.4	7.4	8.8	12.4	9.6	10.7	12.8	9.7	11.0	11.5	8.9	10.4
31	10.5	7.0	8.4	---	---	---	12.0	9.9	10.8	12.0	8.7	10.2
MONTH	11.4	5.3	8.1	12.7	6.7	9.1	13.5	8.7	10.6	12.8	8.2	10.2
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	11.7	8.4	9.7	11.7	8.9	10.4	8.4	6.2	7.3	7.6	5.3	6.6
2	11.7	8.6	9.7	11.8	9.2	10.3	9.2	6.6	8.2	7.6	5.2	6.5
3	11.9	8.5	9.7	11.9	9.4	10.3	9.6	7.3	8.6	7.4	4.8	6.2
4	12.1	8.2	9.9	12.3	9.1	10.5	9.7	7.2	8.4	6.9	4.8	5.8
5	11.4	8.6	9.7	11.1	8.2	9.9	9.5	7.3	8.3	7.1	5.4	6.2
6	11.8	8.2	9.8	10.6	7.4	9.2	9.5	6.9	8.2	7.0	5.3	6.1
7	11.7	8.2	9.7	10.0	7.2	8.6	9.4	7.1	8.2	7.4	5.6	6.4
8	11.4	8.2	9.5	10.0	8.0	9.1	10.4	7.1	8.5	7.5	6.0	6.7
9	11.6	8.7	9.9	11.7	8.2	10.1	10.1	6.6	8.3	7.9	6.7	7.2
10	12.2	8.7	9.9	11.4	7.7	9.6	10.2	6.5	8.0	8.0	6.4	7.2
11	11.8	8.2	9.5	10.5	7.4	8.8	10.3	6.2	8.0	7.9	6.6	7.2
12	11.1	8.4	9.6	10.0	7.2	8.5	10.6	6.4	8.1	8.1	6.8	7.5
13	12.0	8.6	10	10.4	7.2	8.7	11.1	6.0	8.2	8.2	6.4	7.3
14	11.6	8.6	10.1	9.1	7.2	8.1	11.4	5.7	8.2	8.0	6.7	7.3
15	12.0	8.6	10.1	10.2	7.9	9.0	11.1	5.7	7.9	7.6	5.6	6.7
16	11.8	8.4	9.9	10.2	7.3	8.8	11.2	5.6	8.1	7.1	5.7	6.3
17	11.5	8.2	9.8	10.3	7.5	9.0	11.6	5.6	8.3	7.4	6.1	6.5
18	11.2	8.2	9.3	10.1	7.5	8.8	12.2	5.6	8.6	7.3	5.4	6.4
19	11.0	7.8	9.1	9.5	6.8	8.2	12.1	6.2	8.8	7.2	5.7	6.4
20	10.9	7.9	9.2	10.1	7.6	8.8	10.5	6.1	8.0	7.4	5.6	6.5
21	10.5	7.5	8.8	9.1	7.6	8.3	10.9	6.4	8.6	7.0	5.4	6.2
22	11.3	7.9	9.4	9.8	7.7	8.9	11.1	6.3	8.6	7.6	5.5	6.6
23	10.6	7.5	9.0	9.2	6.6	8.0	11.3	6.2	8.5	7.2	5.6	6.3
24	10.8	7.8	9.1	9.2	6.7	8.4	11.4	6.2	8.6	8.4	5.9	7.3
25	11.8	8.3	10.1	10.1	8.2	9.1	11.0	5.5	8.3	7.7	6.2	6.9
26	12.1	7.7	10.1	10.4	6.7	8.4	10.4	5.5	7.6	7.6	6.3	6.9
27	11.7	7.9	9.7	8.9	6.8	7.8	9.8	5.7	7.5	7.7	6.2	6.9
28	11.2	8.5	9.9	8.6	6.6	7.6	8.9	5.1	7.1	7.5	5.3	6.5
29	---	---	---	8.8	6.7	7.7	8.4	5.2	6.8	6.6	5.1	5.9
30	---	---	---	7.6	5.8	6.9	8.1	5.3	6.6	7.0	5.2	6.1
31	---	---	---	8.1	6.2	7.1	---	---	---	6.8	5.2	6.0
MONTH	12.2	7.5	9.7	12.3	5.8	8.8	12.2	5.1	8.1	8.4	4.8	6.6

ARKANSAS RIVER BASIN

07109500 ARKANSAS RIVER NEAR AVONDALE, CO--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.3	5.3	6.4	7.2	4.6	5.9	8.7	4.2	6.5	6.8	4.7	5.6
2	7.9	5.5	6.7	7.9	4.6	5.8	8.5	5.4	6.9	7.3	4.7	5.9
3	7.9	5.6	6.7	8.0	5.4	6.8	9.2	5.8	7.2	7.7	4.8	6.2
4	7.3	6.0	6.7	7.9	5.5	6.6	10.4	6.0	7.7	9.0	5.4	6.8
5	7.6	5.9	6.7	7.9	5.3	6.5	11.7	6.2	8.4	10.0	5.5	7.3
6	7.9	6.1	7.0	7.0	3.7	5.3	11.1	5.5	8.2	10.1	5.5	7.3
7	7.8	6.0	6.9	5.8	5.1	5.5	10.7	5.2	7.7	10.5	5.2	7.3
8	7.8	6.0	6.8	6.2	5.1	5.7	11.7	5.3	7.8	9.9	4.7	6.7
9	7.7	6.2	6.9	6.8	5.4	6.0	11.3	5.5	7.9	9.3	4.6	6.5
10	8.0	6.3	7.1	6.7	5.3	6.0	13.8	5.6	8.7	8.6	4.9	6.1
11	7.7	6.0	6.9	6.4	4.9	5.7	12.6	5.0	8.2	6.0	4.9	5.4
12	7.9	6.2	7.0	6.4	4.9	5.7	12.3	5.0	8.2	7.2	5.4	6.3
13	7.8	5.7	6.8	6.8	5.1	6.1	11.5	4.9	7.9	6.7	5.7	6.2
14	7.2	5.4	6.3	7.2	5.8	6.7	10.4	4.9	7.2	6.7	4.0	6.0
15	8.2	5.5	6.6	7.5	5.5	6.6	9.9	4.8	7.0	7.6	6.1	6.9
16	7.6	5.5	6.4	7.8	5.6	6.8	9.6	4.7	6.7	7.9	6.1	7.0
17	7.9	5.2	6.5	7.4	5.3	6.5	9.2	4.7	6.9	8.2	6.2	7.3
18	8.7	5.2	7.2	7.3	4.9	6.1	8.4	4.8	6.4	8.8	6.4	7.6
19	8.7	6.1	7.3	7.1	4.6	5.8	8.3	4.8	6.4	8.0	6.5	7.4
20	8.9	6.1	7.2	7.2	4.5	5.8	8.8	4.8	6.2	8.0	6.1	7.2
21	8.6	5.6	7.0	6.8	4.4	5.4	9.1	4.7	6.4	8.2	6.2	7.1
22	8.0	5.7	6.8	---	---	---	7.7	4.5	5.8	8.7	6.3	7.5
23	8.0	5.7	6.8	6.6	5.2	6.0	7.4	4.0	5.5	10.2	6.8	8.3
24	7.7	5.7	6.6	6.8	4.8	5.8	7.1	3.7	5.2	11.5	6.7	8.6
25	8.0	5.8	6.8	6.9	4.8	5.8	---	---	---	11.9	6.7	8.9
26	8.1	5.9	6.9	7.3	5.3	6.2	7.6	5.1	6.9	12.9	7.0	9.2
27	7.9	5.9	6.8	7.2	5.1	6.1	7.2	4.5	5.6	13.4	7.0	9.3
28	8.0	5.8	6.8	6.8	4.9	5.7	7.5	4.5	5.8	13.2	6.0	9.0
29	7.8	5.4	6.6	6.6	4.8	5.6	7.4	4.5	5.8	12.7	6.0	8.7
30	7.5	5.1	6.3	6.6	4.3	5.5	5.7	4.0	5.2	12.9	5.5	8.4
31	---	---	---	6.4	3.9	5.2	6.1	4.7	5.6	---	---	---
MONTH	8.9	5.1	6.8	---	---	---	---	---	---	13.4	4.0	7.3

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.8	8.0	8.3	8.3	7.9	7.9	8.5	8.2	8.3	8.4	8.1	8.3
2	8.7	8.0	8.3	8.4	7.9	8.0	8.6	8.2	8.3	8.6	8.2	8.3
3	8.7	8.0	8.1	8.5	7.9	8.0	8.5	8.2	8.2	8.3	8.0	8.2
4	8.7	8.0	8.2	8.5	8.0	8.0	8.5	8.1	8.2	8.4	7.9	8.2
5	8.7	8.0	8.2	8.4	7.9	8.0	8.5	8.2	8.2	8.5	8.0	8.2
6	8.5	8.0	8.1	8.4	7.9	8.0	8.5	8.1	8.2	8.5	8.1	8.3
7	8.5	8.0	8.1	8.5	8.0	8.1	8.4	8.1	8.2	8.6	8.0	8.3
8	8.4	7.9	8.0	8.2	8.0	8.1	8.5	8.0	8.2	8.7	8.2	8.4
9	8.3	7.9	8.0	8.3	8.1	8.2	8.5	8.1	8.2	8.6	8.2	8.3
10	8.4	8.0	8.2	8.3	8.1	8.2	8.4	8.1	8.2	8.6	8.1	8.2
11	8.3	7.9	8.2	8.4	8.1	8.2	8.4	8.1	8.2	8.6	8.2	8.3
12	8.3	7.9	8.1	8.4	8.1	8.2	8.4	8.1	8.2	8.6	8.2	8.2
13	8.3	7.9	8.1	8.4	8.1	8.2	8.4	8.1	8.2	8.7	8.2	8.3
14	8.5	8.0	8.2	8.5	8.1	8.2	8.3	7.9	8.2	8.5	8.0	8.2
15	8.3	7.9	8.1	8.4	8.1	8.2	8.2	7.9	7.9	8.5	8.0	8.3
16	8.5	8.0	8.2	8.4	8.1	8.2	8.2	7.9	7.9	8.4	8.1	8.2
17	8.4	7.9	8.2	8.3	8.0	8.1	8.3	7.9	7.9	8.5	8.2	8.3
18	8.4	8.0	8.2	8.5	8.1	8.2	8.3	7.9	7.9	8.5	8.1	8.3
19	8.6	8.0	8.2	8.5	8.1	8.2	8.3	7.9	8.0	8.5	8.1	8.3
20	8.6	8.1	8.3	8.5	8.1	8.2	8.3	7.9	8.0	8.5	8.1	8.3
21	8.4	8.0	8.2	8.6	8.2	8.2	8.4	7.9	8.1	8.6	8.0	8.3
22	8.6	8.0	8.2	8.6	8.2	8.3	8.4	7.9	8.0	8.7	8.0	8.3
23	8.4	8.0	8.1	8.6	8.2	8.3	8.6	8.0	8.1	8.7	8.3	8.4
24	8.3	7.9	8.1	8.6	8.2	8.3	8.3	8.1	8.2	8.6	8.1	8.3
25	8.4	7.8	8.0	8.5	8.2	8.2	8.3	8.1	8.1	8.7	8.1	8.3
26	8.4	7.8	7.9	8.5	8.2	8.2	8.5	8.1	8.2	8.7	8.1	8.3
27	8.3	7.8	8.0	8.4	8.1	8.2	8.5	8.2	8.3	8.7	8.1	8.3
28	8.5	7.8	8.0	8.4	8.1	8.2	8.5	8.2	8.3	8.7	8.2	8.3
29	8.6	7.9	8.0	8.4	8.2	8.2	8.6	8.2	8.3	8.7	8.1	8.2
30	8.5	7.9	8.1	8.6	8.2	8.3	8.5	8.2	8.3	8.6	8.2	8.3
31	8.4	7.9	7.9	---	---	---	8.4	8.2	8.3	8.8	8.2	8.4
MAX	8.8	8.1	8.3	8.6	8.2	8.3	8.6	8.2	8.3	8.8	8.3	8.4
MIN	8.3	7.8	7.9	8.2	7.9	7.9	8.2	7.9	7.9	8.3	7.9	8.2

ARKANSAS RIVER BASIN

07109500 ARKANSAS RIVER NEAR AVONDALE, CO--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
1	8.5	8.2	8.4	8.2	8.0	8.1	8.5	8.1	8.2	8.5	7.7	8.0
2	8.5	8.2	8.3	8.2	7.9	8.0	8.4	8.0	8.1	8.6	7.9	8.0
3	8.7	8.1	8.3	8.3	7.9	8.1	8.5	8.0	8.1	8.5	7.8	8.0
4	8.7	8.2	8.4	8.3	7.9	8.0	8.4	8.0	8.1	8.1	7.7	8.0
5	8.6	8.2	8.3	8.3	7.9	8.0	8.5	8.0	8.1	8.1	7.9	8.0
6	8.7	8.2	8.4	8.3	7.9	8.0	8.4	7.9	8.1	8.1	7.9	8.0
7	8.7	8.1	8.3	8.3	7.9	7.9	8.4	7.9	8.1	8.1	8.0	8.0
8	8.8	8.2	8.4	8.3	7.9	7.9	8.4	7.8	8.0	8.1	8.0	8.0
9	8.6	8.1	8.2	8.2	7.8	7.9	8.5	7.8	8.1	8.1	7.9	8.0
10	8.7	8.1	8.3	8.3	7.8	8.0	8.5	7.9	8.1	8.1	7.9	8.0
11	8.6	8.1	8.2	8.3	7.9	8.0	8.7	7.9	8.0	8.1	8.0	8.0
12	8.6	8.0	8.2	8.3	7.8	8.0	8.8	7.9	8.1	8.2	8.0	8.1
13	8.8	8.1	8.4	8.5	7.9	8.1	8.9	7.9	8.2	8.2	8.0	8.1
14	8.7	8.1	8.3	8.4	8.0	8.1	9.0	7.9	8.3	8.2	8.0	8.1
15	8.8	8.2	8.3	8.4	7.9	8.0	9.0	7.9	8.3	8.0	7.8	8.0
16	8.7	8.1	8.3	8.4	7.9	8.0	9.1	7.9	8.3	8.1	7.8	7.9
17	8.7	8.2	8.4	8.4	7.9	8.1	9.1	7.9	8.3	8.0	7.8	7.8
18	8.7	8.3	8.4	8.4	7.9	8.0	9.1	7.9	8.3	8.0	7.8	7.9
19	8.7	8.3	8.4	8.4	7.9	8.1	9.2	7.8	8.3	8.1	7.8	7.9
20	8.7	8.3	8.4	8.3	7.9	8.2	8.6	7.9	8.1	8.1	7.8	7.9
21	8.6	8.1	8.3	8.3	8.0	8.1	9.0	7.9	8.2	8.2	7.9	8.0
22	8.6	7.9	8.3	8.3	8.0	8.1	9.0	7.8	8.2	8.3	7.9	8.0
23	8.6	8.0	8.2	8.3	8.0	8.1	9.0	7.9	8.2	8.2	7.9	8.0
24	8.6	8.0	8.2	8.3	8.0	8.1	9.0	7.8	8.2	8.2	7.9	8.0
25	8.5	8.1	8.2	8.4	8.0	8.1	8.9	7.8	8.0	8.0	7.9	8.0
26	8.3	8.0	8.1	8.3	8.0	8.1	8.7	7.8	8.0	8.1	8.0	8.1
27	8.4	8.0	8.1	8.5	8.0	8.2	8.7	7.8	8.1	8.2	8.1	8.1
28	8.4	7.9	8.1	8.5	8.1	8.2	8.6	7.9	8.1	8.2	8.0	8.1
29	---	---	---	8.5	8.1	8.2	8.6	7.9	8.1	8.2	7.9	8.0
30	---	---	---	8.4	8.0	8.1	8.5	7.8	8.0	8.3	7.9	8.1
31	---	---	---	8.5	8.0	8.2	---	---	---	8.4	7.9	8.1
MAX	8.8	8.3	8.4	8.5	8.1	8.2	9.2	8.1	8.3	8.6	8.1	8.1
MIN	8.3	7.9	8.1	8.2	7.8	7.9	8.4	7.8	8.0	8.0	7.7	7.8
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
1	8.4	7.9	8.1	8.3	7.8	7.9	8.7	8.1	8.5	8.4	7.9	8.1
2	8.6	7.9	8.1	8.4	7.8	8.0	8.8	8.0	8.3	8.6	8.1	8.3
3	8.4	8.0	8.1	8.4	7.8	8.0	8.7	8.1	8.3	8.8	8.0	8.3
4	8.1	8.0	8.1	8.4	7.8	8.0	8.9	8.0	8.3	8.7	7.9	8.1
5	8.2	7.8	8.1	8.4	7.8	8.0	8.9	8.2	8.4	8.7	7.9	8.1
6	8.3	8.1	8.2	8.0	7.5	7.7	9.0	8.1	8.4	8.9	7.9	8.1
7	8.3	8.1	8.2	7.9	7.7	7.8	8.8	7.9	8.4	8.9	7.8	8.2
8	8.4	8.1	8.2	7.9	7.8	7.9	8.7	7.8	8.0	8.9	7.8	8.2
9	8.3	8.1	8.2	8.1	7.8	7.9	8.8	7.7	8.0	8.9	7.8	8.1
10	8.4	8.1	8.2	8.0	7.8	7.9	9.0	7.8	8.2	8.6	7.8	8.0
11	8.4	8.1	8.2	8.0	7.8	7.9	9.1	7.8	8.3	8.0	7.8	7.9
12	8.4	8.1	8.2	8.1	7.8	7.9	8.9	7.8	8.2	8.3	8.0	8.1
13	8.5	8.0	8.2	8.2	7.9	7.9	8.8	7.8	8.1	8.1	7.9	8.0
14	8.5	8.0	8.2	8.3	7.9	8.0	8.6	7.7	7.9	8.2	7.7	8.1
15	8.4	8.0	8.2	8.3	7.9	8.0	8.6	7.6	7.9	8.4	8.1	8.2
16	8.4	8.0	8.1	8.4	7.9	8.1	8.5	7.7	7.9	8.5	8.1	8.3
17	8.4	8.0	8.1	8.5	8.0	8.1	8.7	7.7	8.0	8.5	8.1	8.2
18	8.6	8.0	8.2	8.5	7.9	8.1	8.5	7.7	8.0	8.6	8.0	8.2
19	8.4	7.9	8.2	8.6	7.9	8.2	8.6	7.7	8.0	8.4	8.1	8.2
20	8.5	7.9	8.1	8.6	8.0	8.2	8.4	7.8	8.0	8.5	8.0	8.2
21	8.5	7.9	8.0	8.6	8.0	8.1	8.4	7.7	7.8	8.6	8.1	8.2
22	8.3	7.9	8.0	8.0	7.9	7.9	8.4	7.7	7.8	8.7	8.1	8.4
23	8.3	8.0	8.0	8.3	8.0	8.1	8.3	7.6	7.7	8.6	8.2	8.3
24	8.3	8.0	8.1	8.4	8.0	8.1	8.5	7.6	7.9	8.7	8.0	8.3
25	8.2	7.8	8.0	8.4	8.0	8.1	8.4	7.8	7.9	8.9	8.1	8.3
26	8.1	7.8	7.9	8.4	8.0	8.1	8.5	7.9	8.1	8.9	8.2	8.4
27	8.2	7.8	7.9	8.3	8.0	8.1	8.4	7.8	7.9	8.9	8.3	8.5
28	8.2	7.8	7.9	8.3	8.0	8.0	8.4	7.8	8.0	8.8	8.3	8.5
29	8.3	7.8	8.0	8.2	7.9	8.0	8.6	7.8	8.1	8.7	8.3	8.5
30	8.3	7.8	8.0	8.3	7.8	8.1	8.1	7.7	7.9	8.7	8.4	8.6
31	---	---	---	8.5	8.1	8.3	8.3	7.8	7.9	---	---	---
MAX	8.6	8.1	8.2	8.6	8.1	8.3	9.1	8.2	8.5	8.9	8.4	8.6
MIN	8.1	7.8	7.9	7.9	7.5	7.7	8.1	7.6	7.7	8.0	7.7	7.9

ARKANSAS RIVER BASIN

07109500 ARKANSAS RIVER NEAR AVONDALE, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN									
1	1070	1000	1040	1000	943	970	1110	1070	1090	1160	1120	1140
2	1110	1050	1070	966	932	955	1110	1080	1090	1150	1110	1130
3	1110	1040	1080	992	952	967	1110	1070	1090	1150	1110	1130
4	1080	1020	1060	984	952	968	1100	1070	1090	1160	1120	1130
5	1070	975	1020	981	938	958	1120	1070	1090	1170	1120	1140
6	1010	962	980	971	918	952	1110	1070	1100	1160	1100	1120
7	1000	955	975	929	893	909	1160	1100	1130	1140	1100	1120
8	985	943	965	900	826	864	1170	1140	1150	1150	1100	1130
9	971	795	870	837	814	824	1170	1130	1150	1150	1110	1130
10	850	810	832	871	826	842	1160	1120	1140	1140	1090	1120
11	861	830	847	906	842	864	1150	1120	1140	1120	1090	1110
12	866	824	844	947	878	898	1160	1120	1140	1140	1100	1120
13	841	806	821	955	932	946	1180	1120	1150	1140	1090	1110
14	842	821	832	1020	948	991	1170	1140	1150	1130	1080	1110
15	840	805	821	1070	1010	1030	1170	1130	1150	1120	1080	1100
16	813	780	797	1070	1020	1040	1150	1110	1130	1120	1070	1100
17	822	792	808	1060	1040	1050	1150	1120	1130	1130	1090	1110
18	833	800	816	1050	1040	1050	1140	1110	1130	1130	1070	1100
19	846	817	832	1070	1030	1040	1140	1110	1130	1140	1090	1120
20	1030	826	930	1080	1040	1060	1150	1120	1130	1140	1090	1110
21	1030	974	1000	1110	1060	1090	1170	1120	1140	1130	1090	1110
22	1020	988	1000	1110	1060	1090	1160	1120	1140	1170	1090	1120
23	1000	922	947	1100	1070	1080	1160	1120	1140	1160	1130	1140
24	942	884	917	1090	1060	1080	1150	1100	1130	1150	1110	1140
25	921	861	893	1090	1050	1060	1160	1100	1130	1150	1100	1130
26	904	870	888	1070	1040	1050	1150	1100	1120	1160	1120	1140
27	960	896	932	1060	1010	1030	1120	1080	1100	1150	1110	1130
28	959	913	941	1030	1010	1020	1120	1070	1090	1160	1120	1140
29	950	899	927	1030	1000	1020	1120	1070	1090	1170	1130	1160
30	979	942	960	1100	1030	1070	1120	1080	1100	1160	1140	1150
31	1000	961	986	---	---	---	1160	1110	1120	1180	1130	1150
MONTH	1110	780	924	1110	814	992	1180	1070	1120	1180	1070	1130
DAY	MAX	MIN	MEAN									
1	1180	1130	1160	1090	1060	1080	1040	1000	1020	1200	1180	1190
2	1190	1140	1160	1080	1020	1040	1010	935	968	1210	1170	1190
3	1180	1130	1160	1080	1040	1060	935	899	916	1180	1140	1160
4	1170	1130	1150	1080	1050	1070	936	905	924	1170	794	932
5	1170	1140	1150	1100	1070	1080	931	896	915	813	780	796
6	1180	1120	1140	1090	1070	1080	934	878	917	809	784	797
7	1180	1140	1160	1120	1080	1100	926	891	910	784	763	775
8	1160	1130	1150	1110	1080	1100	920	885	906	775	753	765
9	1160	1130	1140	1120	1090	1100	940	865	888	776	745	758
10	1140	1110	1120	1120	1090	1100	970	927	950	767	740	752
11	1170	1120	1140	1110	1090	1100	961	857	941	773	749	759
12	1160	1130	1150	1140	1110	1120	950	916	936	780	747	762
13	1160	1110	1140	1160	1140	1150	953	900	929	818	769	789
14	1150	1120	1130	1160	1000	1040	984	906	934	843	807	822
15	1150	1100	1120	1150	989	1030	1010	964	986	977	831	914
16	1140	1100	1120	1150	1030	1060	1100	1010	1070	976	952	963
17	1130	1110	1120	1060	1040	1050	1110	1060	1090	1060	918	960
18	1130	1080	1110	1050	1020	1030	1160	1090	1120	1000	937	969
19	1170	1120	1140	1080	924	1060	1160	1080	1130	937	872	893
20	1140	1120	1130	924	756	787	1150	1080	1120	919	897	908
21	1160	1130	1140	1060	847	1010	1100	1000	1050	966	907	945
22	1150	1120	1130	1080	1040	1060	1080	996	1050	907	825	847
23	1150	1130	1140	1110	1070	1080	1110	1050	1080	888	845	858
24	1140	1120	1130	1110	1060	1090	1080	1030	1060	1030	835	875
25	1140	1100	1110	1090	1040	1060	1090	1040	1070	1030	796	835
26	1120	1090	1100	1070	1020	1050	1060	1010	1030	837	754	796
27	1110	1070	1090	1070	1010	1030	1090	1030	1050	790	753	768
28	1100	1060	1080	1070	982	1010	1140	1090	1110	924	774	840
29	---	---	---	1020	977	993	1180	1140	1160	955	921	935
30	---	---	---	1090	1020	1070	1200	1160	1180	994	946	964
31	---	---	---	1090	1040	1080	---	---	---	1090	950	1010
MONTH	1190	1060	1130	1160	756	1060	1200	857	1010	1210	740	888

ARKANSAS RIVER BASIN

07109500 ARKANSAS RIVER NEAR AVONDALE, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1090	992	1030	825	796	809	1120	1070	1090	1290	1240	1260
2	992	901	937	822	795	810	1130	1070	1100	1280	1180	1250
3	901	816	867	823	794	806	1140	1090	1110	1280	1150	1210
4	906	783	820	849	817	829	1150	1100	1120	1270	1170	1240
5	823	746	803	861	812	826	1140	1080	1120	1270	1220	1250
6	800	772	785	1000	762	840	1140	1080	1120	1270	1220	1250
7	797	769	784	776	710	739	1150	1080	1120	1270	1210	1250
8	788	766	774	776	738	749	1160	1090	1130	1280	1240	1260
9	768	701	719	813	711	752	1160	1080	1130	1290	1220	1260
10	730	696	707	887	813	848	1140	1060	1100	1300	1220	1260
11	815	725	752	971	887	945	1140	1020	1100	1310	996	1130
12	833	807	819	983	926	951	1150	1070	1120	1260	1120	1210
13	885	801	827	957	797	927	1170	1120	1150	1320	975	1170
14	985	885	932	973	762	885	1180	1130	1160	1800	979	1220
15	1100	947	984	991	945	965	1190	1110	1160	1270	1220	1240
16	1080	972	988	981	813	840	1180	1110	1160	1270	1230	1250
17	1030	969	991	861	784	824	1190	1120	1150	1280	1240	1260
18	1050	999	1020	878	849	859	1190	1050	1140	1280	1240	1270
19	1050	970	998	877	823	852	1180	1110	1150	1300	1210	1270
20	1010	932	955	858	797	837	1210	1140	1180	1280	1220	1250
21	969	921	948	892	820	847	1230	1160	1200	1280	1230	1260
22	936	836	852	1080	856	951	1220	1170	1200	1280	1230	1260
23	874	850	863	960	882	922	1260	1160	1200	1280	1250	1270
24	871	842	855	951	900	919	1220	1130	1180	1290	1240	1270
25	863	830	842	928	861	877	1230	1090	1150	1290	1220	1260
26	852	827	840	985	860	886	1240	1190	1200	1270	1200	1240
27	847	816	832	1020	964	988	1250	1190	1230	1280	1180	1230
28	840	805	825	1020	971	993	1250	1200	1230	1230	1150	1200
29	821	788	806	1010	979	994	1310	1170	1250	1240	1160	1200
30	823	790	799	1070	979	1010	1510	1250	1370	1230	1170	1210
31	---	---	---	1090	1020	1060	1460	1280	1340	---	---	---
MONTH	1100	696	865	1090	710	882	1510	1020	1170	1800	975	1240
YEAR	1800	696	1030									

TEMPERATURE, WATER (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	23.5	15.7	19.5	14.4	9.4	12.0	5.8	1.6	3.8	2.6	0.2	1.4
2	22.7	14.9	18.9	13.9	9.3	11.7	6.7	2.7	4.8	3.2	0.0	1.4
3	21.9	15.0	18.5	14.1	9.2	11.7	6.7	3.7	5.2	1.4	0.0	0.6
4	20.3	14.3	17.3	14.3	9.6	12.1	7.2	3.0	5.3	3.7	0.5	2.2
5	16.4	13.1	14.4	14.4	9.3	12.0	7.5	4.4	5.9	4.8	1.4	3.2
6	18.5	11.6	14.9	14.4	9.6	12.0	6.9	2.5	4.9	4.3	0.5	2.6
7	19.9	12.2	16.1	14.6	9.6	12.1	6.0	3.4	4.8	5.8	0.8	3.3
8	19.9	13.3	16.8	12.0	9.2	10.2	5.4	1.5	3.6	8.1	2.3	5.2
9	17.4	14.1	15.7	12.5	8.5	10.4	5.6	1.0	3.5	7.3	3.8	5.7
10	17.1	11.8	14.4	11.7	7.9	10.4	5.7	1.6	3.7	7.0	4.3	5.7
11	16.5	10.8	13.8	11.6	7.6	9.7	5.5	1.0	3.3	6.5	2.0	4.3
12	14.5	11.1	12.9	12.6	8.2	10.4	3.4	1.3	2.6	6.4	2.0	4.3
13	16.5	9.6	12.9	12.2	9.0	10.7	3.1	0.0	1.4	6.4	2.7	4.4
14	16.5	10.5	13.5	13.2	9.5	11.2	5.5	0.0	2.8	4.8	0.9	3.0
15	15.2	10.6	12.9	12.4	8.8	10.6	5.0	1.3	3.1	3.2	0.3	1.9
16	15.5	9.7	12.4	11.9	8.3	10.2	5.1	1.8	3.5	3.0	0.0	1.4
17	16.3	10.5	13.4	12.2	8.9	10.3	5.7	0.9	3.4	3.2	0.0	1.4
18	15.5	11.7	13.4	11.8	7.7	9.7	5.8	2.0	3.9	2.8	0.0	1.2
19	15.8	9.9	12.8	11.0	7.4	9.0	5.0	1.0	3.1	2.9	0.0	1.2
20	16.2	10.1	13.2	10.1	5.6	8.0	4.2	0.7	2.6	3.0	0.0	1.2
21	14.6	9.8	12.5	9.7	4.9	7.6	5.1	0.7	3.1	5.4	0.0	2.5
22	16.4	10.8	13.6	9.5	6.4	7.9	4.9	1.6	3.3	6.2	1.1	3.7
23	16.4	10.5	13.3	8.9	6.0	7.8	3.9	0.1	2.2	3.9	1.4	2.7
24	14.5	9.7	12.1	8.2	4.3	6.3	3.3	0.0	1.7	3.6	0.0	1.6
25	13.0	7.9	10.5	7.0	4.1	5.6	2.9	0.0	1.4	6.4	0.0	3.0
26	13.1	8.0	10.5	6.7	3.9	5.2	4.2	0.0	2.1	7.3	1.7	4.6
27	13.8	7.6	10.7	5.4	2.8	4.1	4.6	0.8	2.7	6.5	2.2	4.4
28	14.5	9.7	12.0	4.3	0.7	2.6	4.7	0.6	2.8	7.3	2.6	4.9
29	14.4	10.4	12.3	4.5	0.3	2.5	4.1	2.0	3.1	4.9	2.3	3.7
30	13.9	10.2	12.0	5.7	1.6	3.7	2.8	1.0	1.9	2.5	1.1	1.7
31	14.1	10.5	12.3	---	---	---	3.3	0.9	1.9	4.5	0.1	1.9
MONTH	23.5	7.6	13.9	14.6	0.3	8.9	7.5	0.0	3.3	8.1	0.0	2.9

07116500 HUERFANO RIVER NEAR BOONE, CO

LOCATION.--Lat 38°13'30", long 104°15'37", in NE¹/₄NE¹/₄ sec.18, T.21 S., R.61 W., Pueblo County, Hydrologic Unit 11020006, at right upstream end of bridge on U.S. Highway 50, 0.8 mi upstream from mouth, and 1.6 mi south of Boone.

DRAINAGE AREA.--1,875 mi².

PERIOD OF RECORD.--January 1922 to September 1925 (monthly and annual discharge only, published in WSP 1311 as "near Nepesta"), October 1979 to current year. Water-quality data available, April to August 1990, July 1998 to April 2001.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gages. Datum of gage is 4,443.75 ft above sea level. Jan. 1922 to Sept. 1925, at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation, ground-water withdrawals, and return flows from irrigated areas. Several measurements of water temperature and specific conductance were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	e0.95	e1.2	e1.5	e1.8	1.8	0.65	0.00	0.00	0.00	0.00
2	0.00	0.00	e0.98	e1.1	e1.6	e1.6	1.7	0.76	0.00	0.00	0.00	0.00
3	0.00	0.00	1.1	e1.0	e1.7	e1.7	1.7	0.83	0.00	0.00	0.00	0.00
4	0.00	0.00	1.2	e1.0	e2.1	e1.9	1.7	0.71	0.00	0.00	0.00	0.00
5	0.00	0.00	1.1	e1.3	e2.3	e2.0	1.6	0.67	0.00	0.00	0.00	0.00
6	0.00	0.00	1.2	e1.3	e2.2	2.1	1.7	0.63	0.00	0.00	0.00	0.00
7	0.00	0.00	1.3	e1.7	e2.5	1.9	1.8	0.67	0.00	0.00	0.00	0.00
8	0.00	0.66	e1.2	e1.9	e2.7	1.9	1.8	0.65	0.00	0.00	0.00	0.00
9	0.00	2.2	e1.2	1.6	e2.4	2.2	1.5	0.69	0.00	0.00	0.00	0.00
10	0.00	1.1	e1.1	1.6	e2.6	2.0	1.5	0.70	0.00	0.00	0.00	0.00
11	0.00	0.79	e1.1	e1.7	e2.7	1.8	1.4	0.68	0.00	0.00	0.00	0.00
12	0.00	0.78	e1.0	e1.7	e2.5	2.0	1.3	0.67	0.00	0.00	0.00	0.00
13	0.00	0.83	e1.0	e2.0	e2.6	2.0	1.4	0.64	0.00	0.00	0.00	0.00
14	0.00	0.87	e1.2	e1.8	e2.7	2.1	1.3	0.61	0.00	0.00	0.00	0.00
15	0.00	0.93	e1.2	e1.5	e2.7	2.2	1.2	0.58	0.00	0.00	0.00	0.00
16	0.00	0.99	e1.3	e1.4	e2.6	3.7	1.1	0.52	0.00	0.00	0.00	0.00
17	0.00	1.0	e1.5	e1.4	2.5	21	1.2	0.55	0.00	0.00	0.00	0.00
18	0.00	1.0	e1.8	e1.4	2.2	8.6	1.1	0.50	0.00	0.00	0.00	0.00
19	0.00	1.0	e1.7	e1.5	2.2	2.5	1.0	0.42	0.00	0.00	0.00	0.00
20	0.00	e1.0	e1.7	e1.5	2.2	2.1	1.1	0.39	0.00	0.00	0.00	0.00
21	0.00	e1.0	e1.9	e1.7	2.0	2.2	1.1	0.35	0.00	0.00	0.00	0.00
22	0.00	1.0	e1.6	e2.0	e2.0	2.5	1.1	0.26	0.00	0.00	0.00	0.00
23	0.00	1.1	e1.5	e1.9	1.9	2.1	1.0	0.24	0.00	0.00	0.00	0.00
24	0.00	1.1	e1.4	e1.7	1.9	2.1	1.1	0.32	0.00	0.00	0.00	0.00
25	0.00	e1.1	e1.4	e1.9	e1.8	2.2	1.1	0.33	0.00	0.00	0.00	0.00
26	0.00	e1.0	e1.5	e2.1	e1.7	2.4	1.1	0.25	0.00	0.00	0.00	0.00
27	0.00	e1.0	e1.6	e2.0	e1.8	2.2	1.0	0.19	0.00	0.00	0.00	0.00
28	0.00	e0.80	e1.7	e2.0	e1.9	1.9	0.87	0.13	0.00	0.00	0.00	0.00
29	0.00	e0.82	e1.6	e1.9	---	1.7	0.79	0.06	0.00	0.00	0.00	0.00
30	0.00	e0.90	e1.5	e1.5	---	1.8	0.68	0.00	0.00	0.00	0.00	0.00
31	0.00	---	e1.3	e1.5	---	1.8	---	0.00	---	0.00	0.00	---
TOTAL	0.00	22.97	41.83	49.8	61.5	90.0	38.74	14.65	0.00	0.00	0.00	0.00
MEAN	0.000	0.766	1.349	1.606	2.196	2.903	1.291	0.473	0.000	0.000	0.000	0.000
MAX	0.00	2.2	1.9	2.1	2.7	21	1.8	0.83	0.00	0.00	0.00	0.00
MIN	0.00	0.00	0.95	1.0	1.5	1.6	0.68	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	46	83	99	122	179	77	29	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2002, BY WATER YEAR (WY)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	
MEAN	10.14	16.29	15.53	20.56	23.74	21.39	32.70	150.1	96.05	24.25	28.12	6.088												
MAX	46.7	46.0	40.2	65.1	65.2	129	224	1113	667	226	254	26.5												
(WY)	1985	1986	1988	1984	1998	1984	1998	1987	1983	1995	1981	1995												
MIN	0.000	0.000	0.000	0.000	0.13	2.12	0.47	0.47	0.000	0.000	0.000	0.000												
(WY)	1990	1990	1990	1990	1990	1990	1990	2002	2002	1989	2002	1980												

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1980 - 2002

ANNUAL TOTAL	2137.06	319.49	
ANNUAL MEAN	5.855	0.875	
HIGHEST ANNUAL MEAN			37.17
LOWEST ANNUAL MEAN			153
HIGHEST DAILY MEAN	249	Aug 26	21
LOWEST DAILY MEAN	0.00	Jun 29	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	Jun 29	0.00
MAXIMUM PEAK FLOW			26
MAXIMUM PEAK STAGE			8.14
ANNUAL RUNOFF (AC-FT)	4240	634	26930
10 PERCENT EXCEEDS	16	2.0	60
50 PERCENT EXCEEDS	1.8	0.66	7.0
90 PERCENT EXCEEDS	0.00	0.00	0.00

e Estimated.

a No flow on many days during most years.

b From rating curve extended above 1,130 ft³/s. Maximum discharge for period of record, 19,400 ft³/s, Aug 1, 1923, from slope-area measurement of peak flow, gage height, 9.4 ft, datum then in use.

c From flood marks. Maximum gage height for period of record, 11.75 ft, Jul 19, 1995.

07119500 APISHAPA RIVER NEAR FOWLER, CO

LOCATION.--Lat 38°05'28", long 103°58'52", in SE¹/₄NW¹/₄ sec.35, T.22 S., R.59 W., Otero Country, Hydrologic Unit 11020007, on left bank on downstream side of bridge on county road HH.5 (revised), 3.5 mi southeast of Fowler, and 5.4 mi upstream from mouth. Prior to July 2, 2002, at site on right bank.

DRAINAGE AREA.--1,125 mi².

PERIOD OF RECORD.--April 1922 to September 1925, May 1939 to current year. Monthly discharge only for some periods, published in WSP 1311. Water-quality data available, November 1963 to September 1967, January to April 1969. year.

REVISED RECORDS.--WSP 957: 1939, 1941. WSP 1117: Drainage area. WSP 1241: 1923(M). WRD Colo. 1974: 1973(M).

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gages. Elevation of gage is 4,317.05 ft above sea level. See WSP 1711 or 1731 for history of changes prior to May 27, 1939. May 27, 1939 to July 30, 1940, at different datum. July 30, 1940 to Sept. 30, 1985, at site on right bank at datum 2.0 ft higher. Sept. 30, 1985 to July 2, 2002, at site on right bank at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by erosion-control and livestock-watering reservoirs, diversions for irrigation, ground-water withdrawals, return flows from irrigated areas, and waste-water flows from Oxford Farmers Co. and Rocky Ford Highline canals. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	8.8	4.0	4.4	2.8	3.0	4.4	3.0	3.0	2.7	2.5	7.0
2	4.9	8.0	4.1	4.2	2.9	2.9	3.7	3.0	3.8	2.2	2.6	3.2
3	4.8	7.7	4.2	3.8	2.8	2.9	e3.5	3.1	2.5	2.0	2.8	2.6
4	5.5	5.3	4.1	3.6	2.7	2.9	e3.3	2.8	8.7	2.0	2.6	2.5
5	5.9	6.2	4.0	3.6	2.8	2.9	e3.1	2.8	9.1	2.2	2.2	2.4
6	4.4	6.8	4.0	3.6	2.7	2.9	e3.0	3.0	3.4	2.0	2.0	2.5
7	4.6	6.9	3.7	3.7	2.7	2.9	e3.0	3.0	3.1	2.1	2.2	2.4
8	4.5	13	3.7	3.6	2.7	3.0	e2.9	3.2	3.9	2.1	2.1	2.3
9	5.0	12	3.7	3.7	2.7	2.9	4.1	3.1	3.3	2.0	2.3	2.5
10	5.7	7.4	3.7	3.7	2.5	3.0	3.2	3.3	3.2	1.9	2.1	2.6
11	4.6	6.7	3.8	3.6	2.6	3.3	3.4	3.0	3.4	2.1	2.0	2.7
12	7.2	8.0	4.0	3.5	2.6	3.5	3.5	3.1	3.4	2.2	2.0	2.8
13	7.6	7.3	3.7	3.6	2.6	3.5	4.0	4.2	4.0	2.0	1.8	2.8
14	7.7	4.7	3.8	3.5	2.7	3.7	3.8	2.9	13	2.0	1.8	2.9
15	7.8	5.3	4.0	3.5	2.7	8.2	3.6	2.8	44	2.0	2.1	2.7
16	8.0	6.4	3.9	3.7	2.7	14	3.7	3.1	5.7	2.1	1.9	2.5
17	6.4	4.3	3.9	3.7	2.8	20	4.1	3.3	3.9	2.1	1.7	2.5
18	5.5	4.3	3.9	3.7	2.9	3.9	3.5	3.2	2.9	2.5	1.9	2.4
19	4.6	4.3	4.0	3.7	3.0	3.5	3.6	3.5	2.9	2.1	2.0	2.7
20	8.2	4.3	4.0	3.6	3.0	3.4	3.5	3.6	2.9	2.1	1.8	2.6
21	13	4.3	4.1	e3.5	2.9	2.8	4.1	3.2	2.7	2.4	1.8	2.5
22	12	4.3	3.9	e3.4	3.0	2.7	3.6	3.3	2.5	2.5	1.7	2.6
23	12	4.6	3.9	e3.2	3.0	2.8	4.3	3.6	2.7	2.7	2.2	2.8
24	9.9	4.4	4.1	e3.1	2.9	3.3	3.7	3.4	2.7	2.7	2.1	2.5
25	8.0	4.2	4.0	e3.0	3.0	3.0	3.8	5.2	2.6	2.5	2.2	2.6
26	7.2	4.1	4.1	3.0	2.8	2.9	3.5	3.2	2.7	2.2	2.2	2.5
27	5.9	4.1	4.1	3.1	2.9	2.8	3.5	3.1	2.6	2.4	2.4	2.5
28	5.8	4.1	4.2	3.0	2.9	2.8	3.5	3.0	2.6	2.6	2.3	2.6
29	6.8	4.2	4.2	3.0	---	3.0	3.5	3.1	2.5	2.5	2.1	2.4
30	6.7	4.2	4.3	3.0	---	3.2	3.2	3.1	2.5	2.5	360	2.6
31	7.0	---	4.2	3.0	---	3.5	---	3.1	---	2.6	31	---
TOTAL	214.7	180.2	123.3	108.3	78.3	129.1	107.6	100.3	156.2	70.0	452.4	82.2
MEAN	6.926	6.007	3.977	3.494	2.796	4.165	3.587	3.235	5.207	2.258	14.59	2.740
MAX	13	13	4.3	4.4	3.0	20	4.4	5.2	44	2.7	360	7.0
MIN	4.4	4.1	3.7	3.0	2.5	2.7	2.9	2.8	2.5	1.9	1.7	2.3
AC-FT	426	357	245	215	155	256	213	199	310	139	897	163

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 2002, BY WATER YEAR (WY)

	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	15.51	16.42	10.69	6.894	9.026	11.37	21.53	42.73	44.03	51.67	62.76	19.05																																																																					
MAX	87.2	83.1	54.7	30.4	54.0	59.6	530	576	290	306	628	154																																																																					
(WY)	1924	1966	1966	1966	1971	1924	1942	1955	1948	1958	1923	1940																																																																					
MIN	1.06	0.90	1.33	2.37	1.85	1.35	0.94	1.65	1.13	1.53	1.56	1.07																																																																					
(WY)	1965	1940	1955	1976	1976	1955	1955	1975	1954	1974	1974	1956																																																																					

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1922 - 2002

ANNUAL TOTAL	2844.6	1802.6					
ANNUAL MEAN	7.793	4.939	26.18				
HIGHEST ANNUAL MEAN			105				
LOWEST ANNUAL MEAN			4.94				
HIGHEST DAILY MEAN	72	Aug 11	360	Aug 30	10100	May 19	1955
LOWEST DAILY MEAN	2.6	Feb 27	1.7	Aug 17	0.00	Feb 5	1951
ANNUAL SEVEN-DAY MINIMUM	2.6	Feb 27	1.8	Aug 16	0.16	Jan 30	1951
MAXIMUM PEAK FLOW			1370	Aug 30	a83000	Aug 22	1923
MAXIMUM PEAK STAGE			7.92	Aug 30	b17.70	Jul 31	1951
ANNUAL RUNOFF (AC-FT)	5640	3580	18970				
10 PERCENT EXCEEDS	13	6.7	43				
50 PERCENT EXCEEDS	5.6	3.2	6.9				
90 PERCENT EXCEEDS	3.3	2.2	2.0				

e Estimated.
a From slope-area measurement of peak flow at site 2 mi upstream from present site, caused by failure of Apishapa Dam 31 mi upstream.
b Site and datum then in use. Peak stage for flood of Aug 22, 1923, unknown.

ARKANSAS RIVER BASIN

07119700 ARKANSAS RIVER AT CATLIN DAM NEAR FOWLER, CO

LOCATION (REVISED).--Lat 38°07'33", long 103°54'41", in NE¹/₄NE¹/₄ sec.20, T.22 S., R.58 W., Otero County, Hydrologic Unit 11020005, on right bank at Catlin Canal flume gage, 2.2 mi downstream from diversion dam for Catlin Canal, 2.3 mi downstream from Apishapa River, and 6.0 mi east of Fowler.

DRAINAGE AREA.--10,901 mi², of which 54 mi² is probably noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to current year. Statistical summary computed for 1975 to current year, subsequent to completion of Pueblo Reservoir.

GAGE.--Water-stage recorder with satellite telemetry on river; water-stage recorder with satellite telemetry and Parshall Flume on Catlin Canal. Datum of gage on river is 4,245.92 ft and on canal is 4,257.87 ft above sea level. Prior to May 13, 1971, gage on river at site 2.2 mi upstream at datum 24.08 ft higher, and gage on canal at site 1.7 mi upstream at datum 3.26 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Discharge computed by combining discharge of river downstream from canal with that of Catlin Canal. Natural flow of stream affected by storage reservoirs, power developments, transbasin and transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants. Flow partly regulated by Pueblo Reservoir (station 07099350) about 69 mi upstream, since Jan. 9, 1974.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	144	301	436	e344	e95	e125	222	70	102	237	80	35
2	131	320	417	e330	e85	e190	187	69	85	207	64	12
3	126	331	385	e300	e100	e360	224	66	130	225	55	4.5
4	128	322	381	e260	e120	345	246	64	252	185	49	1.3
5	132	317	377	193	e120	301	235	79	414	189	41	2.2
6	145	314	358	155	113	297	242	176	512	197	34	2.7
7	175	327	359	146	109	302	247	188	507	296	25	0.70
8	186	376	346	e145	106	320	256	218	449	513	21	0.53
9	194	451	336	e150	76	312	261	246	437	456	20	0.88
10	262	522	364	151	66	303	298	300	636	433	31	1.3
11	323	493	374	137	77	290	239	340	686	230	15	0.00
12	317	458	379	132	60	272	233	317	529	102	5.6	4.0
13	314	416	e370	129	39	219	232	297	335	62	0.96	50
14	334	357	e360	124	38	253	228	277	323	49	0.79	75
15	341	329	363	132	38	352	209	287	275	81	1.8	162
16	350	367	340	129	39	335	168	294	174	31	1.4	96
17	381	333	332	126	40	242	140	213	166	36	2.5	63
18	384	333	338	126	39	260	121	221	132	145	1.9	56
19	376	331	353	119	44	343	110	232	106	159	2.1	53
20	395	336	367	112	49	333	118	255	95	168	2.5	50
21	317	333	350	109	50	663	118	222	135	e164	e2.1	52
22	272	333	344	104	46	344	115	194	167	e170	e2.0	44
23	259	368	349	105	53	298	115	274	214	170	1.8	36
24	240	368	337	98	63	273	99	292	210	167	1.5	34
25	274	368	323	128	66	268	88	298	202	126	1.2	33
26	301	367	328	116	e73	286	88	537	216	168	1.6	34
27	312	339	333	104	e75	320	87	574	228	136	0.88	35
28	293	e380	321	102	94	329	88	601	220	77	3.1	35
29	289	e410	339	108	---	331	83	393	221	87	1.7	35
30	300	437	349	e105	---	313	74	198	233	94	242	34
31	292	---	e340	e100	---	246	---	145	---	96	70	---
TOTAL	8287	11037	11048	4619	1973	9425	5171	7937	8391	5456	782.43	1042.11
MEAN	267	368	356	149	70.5	304	172	256	280	176	25.2	34.7
MAX	395	522	436	344	120	663	298	601	686	513	242	162
MIN	126	301	321	98	38	125	74	64	85	31	0.79	0.00
AC-FT	16440	21890	21910	9160	3910	18690	10260	15740	16640	10820	1550	2070

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2002, BY WATER YEAR (WY)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	412	447	397	421	388	421	608	1286	2049	1346	992	437																
MAX	1234	925	804	854	1249	912	1526	3901	4420	4108	2384	1209																
(WY)	1985	1985	2000	1985	1985	1998	1987	1999	1995	1995	1984	1982																
MIN	91.0	152	133	149	70.5	175	86.6	212	280	176	25.2	34.7																
(WY)	1979	1979	1991	2002	2002	1978	1978	1981	2002	2002	2002	2002																

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1975 - 2002
ANNUAL TOTAL	197424	75168.54	
ANNUAL MEAN	541	206	a768
HIGHEST ANNUAL MEAN			1327 1995
LOWEST ANNUAL MEAN			206 2002
HIGHEST DAILY MEAN	2510	Jul 15	b,e16300 May 1 1999
LOWEST DAILY MEAN	123	Feb 27	c0.00 Sep 11 2002
ANNUAL SEVEN-DAY MINIMUM	135	Feb 23	1.2 Sep 5 5 2002
MAXIMUM PEAK FLOW		d790	Aug 30 d,e,f26000 May 1 1999
MAXIMUM PEAK STAGE		g3.14	Aug 30 11.30 May 1 1999
ANNUAL RUNOFF (AC-FT)	391600	149100	556700
10 PERCENT EXCEEDS	1100	372	1640
50 PERCENT EXCEEDS	381	194	459
90 PERCENT EXCEEDS	185	34	192

- e Estimated.
- a Average discharge for 9 years (water years 1965-73), 636 ft³/s, 460,800 acre-ft/yr, prior to completion of Pueblo Dam.
- b Maximum daily discharge for period of record, 18,300 ft³/s, Jun 18, 1965.
- c Also minimum daily discharge for period of record.
- d Maximum combined instantaneous discharge.
- f Maximum discharge and gage height for period of record, 43,200 ft³/s, Jun 18, 1965, gage height, 7.95 ft, site and datum then in use, from rating curve extended above 13,000 ft³/s on basis of flow-over-dam computation of peak flow.
- g Gage height at Arkansas River gage.

07119700 ARKANSAS RIVER AT CATLIN DAM NEAR FOWLER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1990 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1990 to current year.
 WATER TEMPERATURE: May 1990 to current year.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry.

REMARKS.--Daily specific-conductance records are fair. Daily water-temperature records are good. Daily data that are not published are either missing or of unacceptable quality. Reported specific-conductance values are representative of the stream during steady flows based on cross-section comparisons made during the year at flows between 5.7 to 270 ft³/s. Additional water-quality data were collected as part of a water-quality assessment of drought conditions and are published in the "Drought Synoptic Sampling" section of this report.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 2,150 microsiemens/cm, Aug. 30, 2002; minimum, 244 microsiemens/cm, May 25, 1993.
 WATER TEMPERATURE: Maximum, 33.9°C, Aug. 11, 2002; minimum, 0.0°C, on many days.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 2,150 microsiemens/cm, Aug. 30; minimum, 612 microsiemens/cm, Aug. 30.
 WATER TEMPERATURE: Maximum, 33.9°C, Aug. 11; minimum, 0.0°C, on many days.

WATER-QUALITY DATA COLLECTED AS PART OF PREFERRED STORAGE OPTIONS PLAN, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L) AS CA (00915)	MAGNESIUM, DIS-SOLVED (MG/L) AS MG (00925)	POTASSIUM, DIS-SOLVED (MG/L) AS K (00935)	SODIUM, DIS-SOLVED (MG/L) AS NA (00930)	ANC TIT 4.5 LAB (MG/L) AS CACO3 (90410)	CHLORIDE, DIS-SOLVED (MG/L) AS CL (00940)	FLUORIDE, DIS-SOLVED (MG/L) AS F (00950)
JAN													
11...	1000	187	11.9	8.4	1430	1.5	154	55.6	3.79	99.7	211	32.4	1.0
MAR													
12...	1100	270	10.2	8.3	1280	9.0	126	45.7	4.50	87.4	190	35.0	1.2
MAY													
22...	1025	140	8.8	8.3	1170	15.5	106	38.2	4.04	69.3	178	22.0	.9
JUL													
23...	1100	23	8.4	8.4	1080	24.5	108	38.7	4.04	73.2	--	25.1	1.0

Date	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)
JAN	
11...	577
MAR	
12...	458
MAY	
22...	410
JUL	
23...	369

ARKANSAS RIVER BASIN

07119700 ARKANSAS RIVER AT CATLIN DAM NEAR FOWLER, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN									
1	1520	1420	1480	1320	1290	1310	1420	1390	1400	1460	1410	1440
2	1500	1440	1470	1310	1280	1300	1400	1370	1390	1450	1390	1410
3	1500	1460	1490	1300	1280	1290	1400	1380	1390	1470	1400	1430
4	1530	1470	1500	1290	1280	1280	1400	1370	1380	1410	1360	1380
5	1550	1480	1510	1310	1290	1300	1390	1370	1380	1430	1360	1390
6	1520	1440	1490	1320	1280	1300	1400	1380	1390	1490	1430	1460
7	1480	1400	1450	1300	1270	1290	1420	1390	1400	1500	1460	1480
8	1450	1390	1430	1280	1200	1240	1440	1400	1420	1500	1460	1470
9	1450	1410	1430	1230	1150	1180	1450	1410	1430	1470	1440	1460
10	1440	1150	1330	1160	1090	1110	1460	1400	1420	1450	1410	1430
11	1150	1130	1140	1140	1100	1120	1430	1400	1410	1440	1410	1430
12	1190	1130	1160	1160	1140	1150	1420	1370	1390	1440	1410	1430
13	1200	1160	1180	1220	1160	1200	1480	1380	1450	1440	1430	1440
14	1180	1140	1150	1330	1210	1260	1490	1400	1440	1490	1440	1460
15	1190	1140	1170	1390	1330	1370	1410	1370	1400	1490	1450	1470
16	1200	1170	1190	1430	1320	1360	1420	1400	1410	1510	1460	1480
17	1170	1120	1140	1360	1330	1350	1420	1380	1400	1550	1450	1500
18	1120	1110	1120	1370	1340	1350	1410	1380	1400	1560	1480	1510
19	1140	1120	1130	1360	1340	1350	1420	1390	1400	1570	1480	1510
20	1150	1130	1140	1380	1350	1360	1410	1390	1400	1570	1470	1500
21	1260	1150	1190	1400	1370	1380	1420	1380	1410	1530	1450	1490
22	1330	1260	1300	1410	1380	1400	1420	1400	1400	1540	1480	1510
23	1350	1330	1340	1400	1350	1370	1450	1400	1420	1550	1510	1530
24	1380	1340	1360	1410	1360	1390	1450	1410	1430	1700	1550	1630
25	1340	1300	1320	1410	1380	1390	1470	1420	1440	1600	1520	1550
26	1300	1260	1290	1400	1380	1390	1450	1420	1430	1530	1500	1510
27	1280	1250	1260	1460	1400	1420	1440	1390	1420	1560	1530	1550
28	1310	1260	1290	1460	1380	1420	1450	1410	1430	1560	1540	1550
29	1340	1310	1330	1440	1390	1410	1430	1410	1420	1580	1550	1560
30	1330	1290	1310	1410	1380	1400	1450	1410	1430	1590	1550	1570
31	1300	1280	1290	---	---	---	1460	1410	1440	1590	1540	1570
MONTH	1550	1110	1300	1460	1090	1310	1490	1370	1410	1700	1360	1490
DAY	MAX	MIN	MEAN									
1	1640	1520	1590	1620	1570	1590	1310	1200	1270	1640	1520	1570
2	1630	1520	1570	1670	1500	1620	1360	1280	1320	1680	1580	1610
3	1630	1490	1550	1500	1350	1420	1290	1210	1260	1690	1590	1630
4	1590	1480	1530	1350	1280	1330	1240	1150	1200	1620	1550	1590
5	1550	1470	1500	1320	1260	1290	1200	1140	1170	1730	1450	1600
6	1630	1530	1560	1300	1240	1270	1180	1110	1160	1450	1160	1260
7	1570	1520	1540	1310	1260	1290	1190	1120	1160	1160	1120	1140
8	1580	1530	1550	1310	1270	1290	1170	1120	1140	1120	1030	1070
9	1690	1580	1650	1330	1280	1300	1180	1140	1160	1040	1010	1020
10	---	---	---	1320	1300	1310	1140	1090	1120	1020	978	1000
11	1710	1600	1660	1320	1300	1310	1180	1100	1150	1010	936	969
12	---	---	---	1350	1310	1340	1190	1150	1170	978	960	971
13	1830	1750	1780	1350	1340	1350	1180	1160	1170	1000	969	986
14	1820	1780	1800	1360	1340	1350	1190	1150	1170	1010	995	1010
15	1840	1760	1800	1360	1240	1310	1200	1160	1180	1050	1000	1020
16	1820	1750	1780	1360	1260	1320	1320	1200	1260	1140	1030	1070
17	1810	1740	1770	1560	1300	1400	1420	1310	1350	1190	1140	1170
18	1790	1760	1770	1330	1200	1270	1500	1400	1460	1180	1140	1160
19	1790	1720	1750	1230	1180	1200	1500	1460	1480	1200	1140	1170
20	1800	1640	1730	1250	1200	1240	1490	1440	1460	1190	1070	1140
21	1720	1680	1710	1250	956	1050	1500	1440	1460	1150	1070	1120
22	1760	1720	1740	1200	986	1090	1540	1390	1460	1190	1140	1170
23	1760	1630	1720	1290	1200	1260	1440	1390	1420	1180	1020	1100
24	1670	1620	1640	1310	1280	1300	1540	1430	1480	1040	1010	1030
25	1680	1640	1660	1320	1260	1290	1580	1500	1530	1060	995	1030
26	1700	1600	1660	1270	1190	1240	1580	1460	1540	995	866	919
27	1680	1550	1620	1240	1200	1220	1580	1390	1480	901	859	883
28	1620	1500	1560	1220	1170	1200	1500	1370	1410	910	858	885
29	---	---	---	1200	1150	1180	1480	1390	1430	978	909	940
30	---	---	---	1170	1130	1150	1550	1440	1490	1080	978	1040
31	---	---	---	1210	1140	1190	---	---	---	1150	1080	1110
MONTH	---	---	---	1670	956	1290	1580	1090	1320	1730	858	1140

07119700 ARKANSAS RIVER AT CATLIN DAM NEAR FOWLER, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1250	1140	1190	1020	1000	1010	1360	1300	1330	1450	1310	1380
2	1300	1230	1280	1270	1020	1120	1400	1330	1370	1720	1450	1570
3	1330	1230	1300	1210	953	1060	1440	1400	1410	1770	1710	1740
4	1240	1010	1130	---	---	---	1470	1440	1450	1830	1760	1780
5	1020	964	991	---	---	---	1510	1440	1490	1820	1730	1770
6	969	927	946	---	1010	---	1540	1500	1510	1800	1730	1760
7	943	913	924	1170	940	1060	1550	1500	1530	1780	1670	1730
8	946	918	933	940	864	879	1600	1540	1570	1780	1660	1720
9	950	922	936	925	885	906	1630	1570	1600	1780	1680	1730
10	922	821	869	928	902	913	1860	1600	1650	1820	1690	1750
11	850	811	818	1200	908	1030	1700	1660	1680	1900	1770	1810
12	939	850	911	1310	1120	1220	1720	1650	1680	2010	1780	1830
13	1090	936	1010	1400	1300	1340	1730	1670	1690	1970	1480	1580
14	1070	1010	1040	1460	---	---	1720	1660	1690	1580	1440	1530
15	1230	989	1050	1470	1220	1340	1700	1600	1670	1560	1320	1470
16	1060	984	1020	---	---	---	1630	1600	1620	1530	1440	1480
17	1080	1010	1040	1550	1310	1470	1680	1610	1640	1570	1480	1530
18	1150	1060	1110	1310	1230	1260	1700	1620	1670	1620	1570	1590
19	1260	1140	1190	1250	1080	1170	1720	1650	1690	1650	1600	1620
20	1280	1200	1230	1140	1080	1110	1770	1670	1720	1640	1600	1620
21	1250	1120	1200	---	---	---	1750	1680	1730	1660	1600	1620
22	1120	1070	1100	1100	1060	1090	1730	1630	1700	1670	1610	1640
23	1070	931	1010	1160	1070	1100	1740	1650	1700	1740	1630	1700
24	1080	895	950	1200	1130	1160	1770	1690	1730	1760	1680	1720
25	1080	966	1020	1340	1200	1280	1780	1710	1740	1820	1680	1740
26	1190	1040	1060	---	---	---	1790	1690	1740	1760	1680	1720
27	1070	1040	1050	---	---	---	1850	1670	1770	1790	1670	1720
28	1060	1040	1050	1460	1250	1340	1870	1810	1840	1780	1690	1730
29	1060	1030	1050	1360	1320	1340	1830	1770	1800	1790	1670	1730
30	1060	1000	1020	1350	1270	1320	2150	612	1300	1740	1600	1690
31	---	---	---	1300	1260	1270	1310	970	1200	---	---	---
MONTH	1330	811	1050	---	---	---	2150	612	1610	2010	1310	1670

WATER TEMPERATURE (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	23.6	14.9	18.9	15.0	8.7	11.6	5.6	0.4	2.9	0.7	0.0	0.1
2	22.1	14.0	18.0	14.0	8.1	10.9	6.1	1.9	3.8	1.7	0.0	0.3
3	21.8	13.6	17.6	14.5	8.2	11.2	7.9	3.2	4.9	0.8	0.0	0
4	19.7	13.1	16.0	15.7	11.1	12.8	8.1	2.4	5.1	1.3	0.0	0.4
5	14.1	10.8	12.2	15.1	9.0	11.8	8.1	3.7	5.4	3.9	0.0	1.0
6	18.1	8.7	13.1	14.8	8.8	11.6	7.0	1.7	4.1	3.9	0.0	1.2
7	19.0	10.2	14.6	14.6	8.4	11.3	5.0	2.3	3.4	5.9	0.0	2.5
8	20.0	12.1	15.9	10.7	7.7	9.5	4.9	0.0	2.3	7.8	1.5	5.0
9	18.7	13.5	15.8	11.5	6.6	8.6	4.9	0.0	1.9	8.7	4.1	6.0
10	16.4	10.3	13.0	10.4	6.3	8.3	4.6	0.3	2.1	8.1	3.3	5.9
11	16.3	8.7	12.5	10.5	6.0	8.2	4.9	0.1	2.4	7.2	0.4	3.6
12	13.1	8.7	11.0	11.8	6.9	9.2	2.7	0.0	1.2	7.4	0.7	3.8
13	13.6	5.9	9.8	11.2	7.9	9.6	0.0	0.0	0.0	6.3	1.7	3.6
14	16.0	8.2	11.8	12.8	8.4	10.3	0.6	0.0	0	5.6	0.0	2.1
15	14.5	8.8	11.2	12.6	8.7	10.4	2.5	0.0	1.0	3.1	0.0	0.9
16	14.0	7.3	10.5	11.9	9.0	10.2	4.6	0.6	2.3	2.8	0.0	0.8
17	15.8	8.1	11.7	11.6	7.8	9.2	4.9	0.0	2.2	2.9	0.0	0.7
18	13.7	10.0	11.7	11.7	6.5	8.6	5.6	1.1	3.0	2.3	0.0	0.6
19	14.9	7.3	10.8	11.1	6.5	8.1	4.2	0.2	2.0	2.8	0.0	0.7
20	15.0	8.4	11.4	9.9	4.1	6.6	3.1	0.0	1.4	3.8	0.0	1.0
21	14.0	8.7	11.6	9.3	3.1	5.9	4.2	0.0	2.1	6.6	0.0	2.3
22	16.9	9.3	12.7	8.3	4.1	6.0	5.1	1.6	3.0	8.5	0.8	4.1
23	16.6	9.1	12.6	7.1	4.9	6.5	3.2	0.0	1.3	3.1	0.0	1.8
24	14.2	7.7	10.6	8.6	3.0	5.5	1.9	0.0	0.5	3.1	0.0	0.9
25	12.0	5.7	8.7	7.2	3.2	4.8	1.2	0.0	0.2	6.8	0.0	2.5
26	12.0	5.5	8.5	5.3	1.9	3.3	3.3	0.0	1.1	9.0	0.0	4.2
27	13.1	5.5	9.1	3.8	0.0	1.8	3.9	0.0	1.5	7.5	2.3	4.3
28	13.7	8.1	10.6	1.9	0.0	0.5	3.4	0.0	1.4	8.6	2.3	5.0
29	14.1	9.0	11.3	2.7	0.0	1.0	2.3	0.1	1.4	5.4	0.5	2.8
30	14.2	9.3	11.5	5.2	0.0	2.3	1.4	0.0	0.2	0.7	0.0	0.2
31	16.4	10.6	13.0	---	---	---	1.5	0.0	0.3	3.4	0.0	0.7
MONTH	23.6	5.5	12.5	15.7	0.0	7.9	8.1	0.0	2.1	9.0	0.0	2.2

ARKANSAS RIVER BASIN

07119700 ARKANSAS RIVER AT CATLIN DAM NEAR FOWLER, CO--Continued

WATER TEMPERATURE (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	2.7	0.0	0.5	3.0	0.0	0.9	16.4	8.8	12.5	21.6	11.4	14.9
2	1.4	0.0	0.3	3.1	0.0	0.7	12.1	5.9	8.4	21.8	10.6	14.7
3	3.1	0.0	0.5	0.7	0.0	0	12.9	3.4	7.7	24.2	11.2	16.5
4	6.7	0.0	2.1	6.5	0.0	2.3	14.7	4.5	9.4	23.7	12.4	17.0
5	5.4	0.1	2.1	10.6	1.0	5.4	17.3	7.7	12.4	27.0	12.3	18.5
6	6.7	0.0	2.2	12.5	3.0	7.1	17.1	10.3	13.3	26.5	11.6	18.9
7	9.5	0.0	3.8	11.9	3.4	7.4	14.5	10.5	12.6	24.3	13.4	17.9
8	10.6	1.3	5.2	11.8	3.2	7.3	16.9	9.6	12.7	21.3	12.9	16.1
9	---	---	---	9.3	0.1	4.5	20.5	10.3	14.8	19.4	10.2	14.4
10	---	---	---	10.7	1.6	6.0	16.5	12.2	14.2	21.0	11.5	16.1
11	---	---	---	13.7	5.3	8.8	19.3	10.6	14.4	22.4	13.8	17.5
12	---	---	---	14.7	4.8	9.2	17.7	11.3	14.5	17.2	12.6	14.7
13	10.5	---	---	15.3	6.7	10.2	21.8	11.7	16.3	22.0	10.4	15.8
14	6.5	0.9	3.2	12.4	6.2	9.0	22.3	12.8	17.4	18.3	12.6	15.3
15	11.0	0.0	4.3	8.7	4.8	6.7	22.2	13.9	17.6	24.0	12.8	17.9
16	11.8	0.0	4.6	10.3	3.5	6.6	19.0	11.9	15.2	22.5	15.3	18.5
17	11.8	1.2	6.0	11.0	0.0	6.2	21.2	10.2	15.1	19.1	13.4	15.8
18	12.9	3.9	7.6	12.6	4.4	8.1	19.5	9.4	14.4	25.4	13.0	18.7
19	13.5	5.7	8.4	12.5	5.2	8.6	17.3	8.2	12.1	23.1	15.8	19.1
20	12.5	3.0	7.2	14.1	5.4	9.6	10.9	8.1	8.9	21.1	14.5	18.1
21	12.0	2.7	6.7	10.5	4.5	6.5	17.8	5.8	11.2	21.2	15.4	18.1
22	14.1	0.9	6.8	8.8	2.6	5.6	19.8	8.1	13.9	22.6	11.5	17.3
23	12.3	3.9	7.8	11.3	3.6	7.4	22.0	9.7	15.8	22.4	13.8	17.7
24	13.6	3.7	7.8	8.2	4.0	6.2	20.3	10.2	14.8	16.0	12.2	13.6
25	6.2	0.0	3.0	8.0	2.2	5.0	15.7	9.4	11.9	21.6	9.4	15.2
26	7.6	0.0	2.3	13.2	2.8	7.8	19.1	9.1	13.8	22.3	14.4	18.4
27	8.4	0.0	3.0	15.4	6.5	10.8	19.9	11.3	15.2	21.7	16.5	19.2
28	11.6	0.0	4.4	16.6	8.3	12.0	22.7	9.7	16.1	24.1	16.2	19.8
29	---	---	---	15.0	8.1	11.4	22.0	13.0	16.8	25.9	17.1	21.4
30	---	---	---	16.1	7.4	11.7	24.4	11.4	16.9	29.0	17.4	23.0
31	---	---	---	17.0	8.5	12.6	---	---	---	30.0	18.9	23.9
MONTH	---	---	---	17.0	0.0	7.1	24.4	3.4	13.7	30.0	9.4	17.5
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	27.3	17.9	21.3	31.2	21.7	26.1	26.9	18.6	22.4	29.0	16.0	21.5
2	25.9	16.0	20.3	32.3	21.1	25.3	28.4	16.6	21.4	28.0	14.8	20.4
3	27.2	16.4	20.8	29.7	18.7	23.5	31.3	18.2	23.6	26.3	14.7	19.4
4	19.6	16.1	17.3	---	---	---	32.7	20.3	25.1	30.8	15.7	21.5
5	25.6	14.9	19.8	---	---	---	32.2	20.1	24.7	29.7	14.8	20.9
6	28.1	17.8	22.5	31.2	---	---	30.4	18.4	23.4	29.3	15.0	20.9
7	28.1	19.2	23.2	28.2	21.4	24.5	31.7	17.8	23.4	29.5	16.4	20.9
8	27.7	18.1	22.5	31.6	21.4	26.1	33.7	17.8	24.3	29.2	16.4	20.9
9	27.9	18.1	22.6	30.6	23.4	26.7	32.0	17.8	23.8	25.1	16.1	19.3
10	25.0	18.5	21.6	29.8	21.7	25.2	32.5	19.2	24.3	19.7	16.3	17.6
11	26.5	18.5	22.3	31.5	20.7	25.5	33.9	17.8	24.7	23.8	15.0	18.7
12	27.8	20.0	23.5	31.9	19.7	25.3	29.7	16.3	22.0	29.1	16.2	20.6
13	25.8	19.0	22.0	31.6	19.7	24.9	28.5	15.9	20.9	27.1	15.3	19.8
14	26.6	18.0	21.9	32.0	19.0	---	31.6	14.5	21.8	23.1	16.5	19.1
15	25.1	18.6	21.3	32.1	19.3	24.0	29.1	15.8	21.2	24.2	14.2	18.8
16	25.7	16.7	21.0	---	---	---	32.3	16.3	22.5	25.2	13.9	19.0
17	28.4	17.4	22.8	33.4	---	---	27.9	14.0	19.6	25.0	13.8	18.9
18	28.7	18.9	23.9	31.4	---	---	29.9	14.0	20.3	19.6	14.3	16.8
19	28.3	18.1	22.9	30.8	---	---	30.6	16.1	21.8	20.6	11.5	15.4
20	29.1	18.2	21.3	30.0	19.4	24.4	32.6	16.9	23.0	24.4	11.0	17.1
21	27.3	16.9	21.4	---	---	---	---	18.2	---	22.7	12.9	16.9
22	26.7	18.2	21.5	29.7	---	---	30.8	---	---	22.9	11.0	16.2
23	26.5	18.2	21.8	28.8	20.0	24.2	30.6	16.2	22.0	23.1	12.1	16.6
24	29.5	17.3	23.2	31.4	20.7	24.9	29.4	17.5	21.8	25.9	12.1	17.7
25	29.2	18.7	23.0	---	19.2	---	31.3	18.4	23.1	23.7	12.1	16.7
26	30.5	18.0	23.6	---	---	---	32.1	17.2	23.1	23.0	13.3	16.7
27	29.7	19.6	24.3	---	---	---	28.8	17.3	21.2	22.9	11.3	15.9
28	29.9	19.0	23.6	31.7	17.1	23.6	29.9	16.7	21.2	24.4	13.7	17.3
29	32.1	18.6	24.9	30.8	19.3	24.3	28.3	15.0	20.6	22.4	11.8	16.2
30	31.5	20.0	25.8	31.1	19.0	24.7	21.3	12.4	15.8	25.0	11.6	16.8
31	---	---	---	31.7	19.0	25.0	27.9	13.2	19.4	---	---	---
MONTH	32.1	14.9	22.3	---	---	---	---	---	---	30.8	11.0	18.5

07120480 LAKE MEREDITH OUTLET AT HIGHWAY 71 NEAR ORDWAY, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°08'53", long 103°44'49", in NW¼SW¼ sec.12, T.22 S., R.57 W., Crowley County, Hydrologic Unit 11020005, on right wingwall 5 ft upstream from Lake Meredith outlet gate, 200 ft upstream from State Highway 71, 0.7 mi downstream from Lake Meredith, and 4.6 mi south of Ordway.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--November 2001 to September 2002.

PERIOD OF DAILY RECORD.--
 SPECIFIC CONDUCTANCE: November 2001 to September 2002.
 WATER TEMPERATURE: November 2001 to September 2002.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry.

REMARKS.--Daily specific-conductance records are fair. Daily water-temperature records are good. Daily data that are not published are either missing or of unacceptable quality. Reported values for daily specific conductance and water temperature may not be representative of the lake outflow. Additional water-quality data were collected as part of a water-quality assessment of drought conditions and are published in the "Drought Synoptic Sampling" section of this report.

EXTREMES FOR PERIOD OF RECORD.--
 SPECIFIC CONDUCTANCE: Maximum, 4,400 microsiemens/cm, Sept. 30, 2002; minimum, 1,400 microsiemens/cm, Mar. 23, 26-27, Apr. 2-3, 2002.
 WATER TEMPERATURE: Maximum, 29.7°C, Aug. 4, 2002; minimum, 1.3°C, Feb. 9, 2002.

EXTREMES FOR CURRENT YEAR.--
 SPECIFIC CONDUCTANCE: Maximum during period November to September, 4,400 microsiemens/cm, Sept. 30; minimum, 1,400 microsiemens/cm, Mar. 23, 26-27, Apr. 2-3, 2002.
 WATER TEMPERATURE: Maximum during period November to September, 29.7°C, Aug. 4; minimum, 1.3°C, Feb. 9.

WATER-QUALITY DATA COLLECTED AS PART OF PREFERRED STORAGE OPTIONS PLAN, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC TIT 4.5 LAB (MG/L AS CACO3) (90410)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)
JAN													
11...	1300	e.50	7.7	8.0	2170	6.0	158	76.1	4.54	235	158	85.9	1.4
MAR													
12...	1430	e.50	--	8.5	1670	9.0	135	58.5	4.88	155	135	64.3	1.3
MAY													
22...	1200	166	7.4	8.1	1760	15.0	142	63.2	5.85	167	119	69.4	1.4
JUL													
23...	1330	20	6.1	8.4	2670	24.0	204	92.3	8.59	299	--	137	2.2

Date	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
JAN	
11...	938
MAR	
12...	656
MAY	
22...	675
JUL	
23...	1230

e Estimated value.

ARKANSAS RIVER BASIN

07120480 LAKE MEREDITH OUTLET AT HIGHWAY 71 NEAR ORDWAY, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	1780	1770	1780	1880	1840	1860	1940	1940	1940
2	---	---	---	1810	1770	1790	1880	1840	1870	1950	1940	1940
3	---	---	---	1770	1750	1760	1890	1860	1880	1960	1950	1950
4	---	---	---	1760	1740	1760	1900	1880	1890	1970	1960	1970
5	---	---	---	1770	1760	1760	1890	1880	1880	1980	1970	1980
6	---	---	---	1780	1760	1770	1880	1880	1880	1990	1980	1980
7	---	---	---	1790	1770	1790	1880	1870	1880	1990	1980	1990
8	---	---	---	1820	1790	1810	1880	1870	1880	2050	1990	2030
9	---	---	---	1890	1800	1840	1880	1880	1880	2170	2050	2120
10	---	---	---	1810	1740	1780	1900	1880	1890	2190	2060	2150
11	---	---	---	1740	1720	1730	1900	1900	1900	2230	2180	2210
12	---	---	---	1770	1740	1750	1900	1880	1880	2270	2180	2230
13	---	---	---	1780	1760	1770	1890	1880	1880	2270	2200	2220
14	---	---	---	1770	1760	1760	1920	1890	1900	2210	2210	2210
15	---	---	---	1780	1760	1770	1940	1920	1930	2320	2210	2220
16	---	---	---	1840	1780	1820	1950	1940	1950	2500	2320	2450
17	---	---	---	1860	1840	1860	1960	1950	1950	2510	2490	2500
18	---	---	---	1850	1820	1830	1960	1950	1960	2510	2500	2510
19	---	---	---	1830	1820	1820	1960	1960	1960	2520	2510	2510
20	---	---	---	1820	1820	1820	1960	1960	1960	2510	2500	2510
21	---	---	---	1820	1810	1820	1960	1960	1960	2510	2500	2500
22	---	---	---	1820	1820	1820	1960	1960	1960	2510	2480	2500
23	---	---	---	1820	1800	1810	1960	1950	1960	2480	2390	2410
24	---	---	---	1810	1780	1800	1950	1950	1950	2400	2390	2390
25	---	---	---	1820	1770	1800	1950	1950	1950	2410	2400	2400
26	---	---	---	1810	1770	1780	1950	1950	1950	2420	2410	2410
27	---	---	---	1820	1750	1770	1950	1950	1950	2420	2420	2420
28	---	---	---	1820	1760	1780	1950	1950	1950	2420	2400	2420
29	---	---	---	1860	1760	1790	1950	1940	1940	2400	2380	2390
30	---	---	---	1880	1780	1820	1940	1920	1930	2380	2360	2360
31	---	---	---	---	---	---	1940	1930	1930	2360	2350	2350
MONTH	---	---	---	1890	1720	1790	1960	1840	1920	2520	1940	2260
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	2360	2350	2360	1720	1700	1720	1430	1410	1420	1650	1640	1640
2	2370	2360	2360	1720	1710	1710	1460	1400	1410	1660	1650	1660
3	2370	2360	2370	1720	1690	1710	1420	1400	1410	1670	1660	1660
4	2370	2360	2370	1710	1690	1710	1440	1420	1430	1680	1660	1670
5	2370	2360	2370	1720	1710	1710	1450	1420	1430	1710	1680	1680
6	2370	2370	2370	1740	1700	1720	1450	1420	1430	1710	1650	1670
7	2370	2370	2370	1710	1680	1700	1470	1420	1440	1700	1640	1670
8	2370	2240	2350	1690	1670	1680	1470	1430	1440	1720	1660	1690
9	2240	2170	2200	1680	1670	1670	1470	1440	1450	1730	1640	1690
10	2180	2170	2180	1680	1670	1680	1460	1450	1460	1700	1640	1660
11	2190	2180	2180	1680	1670	1680	1460	1440	1460	1700	1640	1660
12	2200	2190	2190	1680	1680	1680	1470	1460	1460	1730	1670	1690
13	2200	2200	2200	1680	1670	1670	1470	1460	1460	1690	1650	1660
14	2200	1940	2120	1670	1660	1660	1480	1460	1470	1730	1670	1690
15	1960	1940	1950	1660	1640	1660	1490	1480	1480	1720	1680	1690
16	1950	1920	1930	1650	1630	1640	1500	1490	1490	1750	1700	1720
17	1920	1910	1920	1640	1620	1630	1530	1500	1510	1770	1700	1730
18	1930	1910	1930	1620	1570	1600	1560	1530	1550	1720	1690	1700
19	1910	1880	1890	1580	1560	1580	1570	1560	1560	1710	1690	1700
20	1880	1860	1870	1580	1540	1560	1570	1570	1570	1760	1710	1740
21	1860	1830	1840	1540	1530	1530	1580	1570	1570	1810	1710	1750
22	1840	1840	1840	1530	1440	1510	1580	1570	1580	2040	1730	1830
23	1840	1840	1840	1440	1400	1420	1580	1580	1580	1850	1720	1770
24	1840	1800	1820	1420	1410	1410	1580	1570	1580	1870	1760	1800
25	1800	1780	1790	1430	1410	1420	1590	1580	1580	1800	1770	1790
26	1780	1780	1780	1420	1400	1410	1600	1580	1580	1790	1790	1790
27	1780	1730	1760	1420	1400	1420	1600	1590	1600	1800	1780	1800
28	1740	1720	1740	1420	1410	1420	1610	1600	1600	1810	1800	1800
29	---	---	---	1470	1410	1430	1620	1610	1620	1970	1810	1830
30	---	---	---	1460	1410	1430	1640	1620	1620	2000	1880	1920
31	---	---	---	1430	1420	1420	---	---	---	1910	1880	1880
MONTH	2370	1720	2070	1740	1400	1590	1640	1400	1510	2040	1640	1730

07120480 LAKE MEREDITH OUTLET AT HIGHWAY 71 NEAR ORDWAY, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	2020	1910	1970	2380	2330	2350	2840	2670	2730	---	---	---
2	2000	1980	1990	2410	2370	2390	2870	2840	2860	---	---	---
3	2030	2000	2010	2430	2410	2420	2790	2630	2740	---	---	---
4	2040	2000	2020	2430	2420	2420	2680	2640	2670	---	---	---
5	2040	2020	2020	2430	2410	2420	---	---	---	---	---	---
6	2020	1990	2010	2420	2420	2420	---	---	---	---	---	---
7	2000	1740	1840	2450	2410	2430	---	---	---	---	---	---
8	1800	1670	1740	2480	2430	2460	---	---	---	---	---	---
9	1720	1710	1710	2480	2460	2470	---	---	---	---	---	---
10	1710	1690	1700	2490	2450	2480	3290	3170	3230	---	---	---
11	1770	1700	1740	2490	2460	2480	3300	3250	3280	3800	3610	3750
12	1870	1770	1830	2500	2480	2490	3350	3280	3300	3770	3550	3680
13	2140	1850	1960	2500	2480	2490	3530	3320	3410	3720	3610	3660
14	2140	2020	2070	2530	2500	2520	3360	2860	2970	3700	3550	3640
15	2020	1990	2000	2590	2530	2570	3080	2860	2970	3790	3560	3710
16	2040	2000	2010	2630	2590	2610	3340	2950	3160	3750	3650	3690
17	2100	2040	2080	2650	2630	2640	3340	3130	3180	4030	3690	3860
18	2100	2090	2100	2640	2460	2500	3170	2980	3100	4210	3980	4090
19	2100	2060	2090	2490	2450	2470	3220	3090	3150	4060	3820	3920
20	2100	2040	2070	2530	2460	2490	---	---	---	4060	3900	3980
21	2110	2090	2100	2490	2450	2480	---	---	---	3930	3860	3890
22	2130	2110	2110	2680	2450	2550	3350	3210	3280	3950	3850	3910
23	2190	2130	2160	2710	2610	2670	3410	3310	3340	4200	3900	4100
24	2240	2180	2210	2610	2500	2560	3650	3400	3470	---	3840	---
25	2250	2220	2240	2560	2500	2530	3670	3430	3540	4130	3880	4030
26	2250	2200	2230	2740	2550	2650	---	---	---	4300	3970	4110
27	2220	2210	2220	2730	2690	2710	3770	3470	3640	4220	3970	4110
28	2260	2220	2240	2740	2710	2720	4080	3770	3940	---	---	---
29	2300	2260	2280	2840	2710	2730	---	---	---	4240	4090	4160
30	2330	2300	2310	2870	2740	2810	---	---	---	4400	4230	4320
31	---	---	---	2740	2670	2710	---	---	---	---	---	---
MONTH	2330	1670	2040	2870	2330	2540	---	---	---	---	---	---

TEMPERATURE, WATER (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	14.4	12.4	13.3	3.8	3.6	3.7	3.1	3.0	3.1
2	---	---	---	13.7	11.0	11.8	3.9	3.7	3.8	3.1	2.9	3.0
3	---	---	---	13.3	10.3	11.8	4.1	3.9	4.0	3.1	2.9	3.0
4	---	---	---	13.0	10.4	11.7	4.4	4.1	4.2	3.0	2.9	3.0
5	---	---	---	13.0	11.1	12.1	4.5	4.3	4.4	3.2	3.0	3.1
6	---	---	---	12.7	11.3	11.9	4.4	4.1	4.3	3.4	3.0	3.2
7	---	---	---	14.1	11.5	12.0	4.4	3.8	4.0	3.7	3.3	3.5
8	---	---	---	12.5	9.8	11.1	3.8	3.5	3.7	4.1	3.7	4.0
9	---	---	---	11.0	8.9	9.5	3.8	3.1	3.4	4.4	4.1	4.3
10	---	---	---	10.0	7.6	8.9	3.7	3.5	3.6	4.5	4.1	4.4
11	---	---	---	9.9	7.2	8.5	3.9	3.7	3.8	4.6	4.3	4.5
12	---	---	---	10.9	7.7	9.1	3.9	2.4	2.8	4.4	4.2	4.3
13	---	---	---	10.9	8.9	9.8	2.7	2.5	2.6	4.4	3.4	3.8
14	---	---	---	10.7	9.2	10.1	2.8	2.6	2.7	3.8	3.2	3.5
15	---	---	---	11.1	9.0	9.9	3.1	2.8	2.9	3.2	2.8	3.0
16	---	---	---	11.5	9.6	10.4	3.4	3.1	3.3	3.2	3.1	3.2
17	---	---	---	10.1	9.1	9.2	3.6	3.4	3.5	3.2	3.2	3.2
18	---	---	---	10.2	9.0	9.4	3.7	3.6	3.7	3.3	3.2	3.2
19	---	---	---	9.1	8.4	8.7	4.0	3.7	3.9	3.3	3.3	3.3
20	---	---	---	8.4	7.6	7.9	4.0	3.9	3.9	3.4	3.3	3.4
21	---	---	---	7.6	7.0	7.1	4.0	3.8	3.9	3.5	3.4	3.5
22	---	---	---	7.0	6.6	6.7	4.1	4.0	4.1	3.6	3.5	3.5
23	---	---	---	6.8	6.1	6.5	4.2	4.1	4.1	3.5	2.4	2.9
24	---	---	---	6.3	5.8	6.0	4.1	3.9	4.0	2.8	2.5	2.6
25	---	---	---	6.1	5.5	5.8	4.0	3.9	3.9	3.0	2.8	2.9
26	---	---	---	5.5	4.0	4.8	4.0	3.8	3.9	3.2	3.0	3.1
27	---	---	---	4.0	2.4	3.1	4.0	3.9	3.9	3.5	3.2	3.3
28	---	---	---	3.1	2.6	2.9	4.0	3.8	3.9	4.1	3.4	3.6
29	---	---	---	3.3	3.1	3.2	3.8	3.3	3.6	4.1	2.9	3.5
30	---	---	---	3.6	3.3	3.5	3.3	2.2	2.6	3.0	1.8	2.3
31	---	---	---	---	---	---	3.1	2.7	2.8	2.3	2.0	2.2
MONTH	---	---	---	14.4	2.4	8.6	4.5	2.2	3.6	4.6	1.8	3.3

ARKANSAS RIVER BASIN

07120480 LAKE MEREDITH OUTLET AT HIGHWAY 71 NEAR ORDWAY, CO--Continued

TEMPERATURE, WATER (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	2.5	2.3	2.4	3.6	1.8	2.8	14.2	10.9	12.1	15.6	14.5	15.0
2	2.7	2.5	2.6	2.3	1.8	2.0	13.4	7.0	8.9	14.6	13.8	14.2
3	2.8	2.6	2.7	3.8	2.2	2.6	7.7	5.5	6.6	15.5	14.2	14.4
4	3.0	2.8	2.9	3.0	2.6	2.8	10.9	2.6	7.0	16.5	14.9	15.7
5	3.1	2.9	3.0	3.3	3.0	3.2	11.9	7.8	9.9	18.0	14.9	16.2
6	3.2	3.0	3.1	3.8	3.3	3.5	13.4	10.6	12.0	20.3	15.1	17.8
7	3.3	3.1	3.2	5.0	3.5	4.4	15.8	10.4	12.3	20.1	14.9	17.8
8	3.8	3.2	3.4	5.7	4.9	5.1	15.4	11.3	13.1	20.1	15.2	17.3
9	3.8	1.3	2.5	5.4	4.5	4.9	15.6	11.0	13.2	16.8	11.7	13.9
10	1.9	1.5	1.8	6.2	4.8	5.1	14.3	12.1	12.8	17.2	10.3	14.0
11	2.3	1.9	2.1	6.3	4.9	5.6	14.6	11.9	12.4	20.2	14.5	16.9
12	2.4	2.3	2.4	6.2	5.7	6.0	14.4	12.4	13.0	16.6	11.8	13.6
13	2.6	2.4	2.5	8.6	5.4	6.9	13.3	13.1	13.2	17.9	11.7	14.7
14	3.4	2.6	2.9	8.7	7.3	7.7	15.4	13.2	13.6	17.6	13.0	14.7
15	3.3	2.9	3.0	7.6	6.9	7.2	16.0	14.4	15.1	20.4	13.0	16.4
16	4.0	2.8	3.1	7.1	6.5	6.7	15.8	15.2	15.5	20.4	16.0	17.9
17	4.1	3.2	3.3	6.6	6.1	6.3	15.4	14.3	14.8	17.8	14.0	15.8
18	4.5	3.3	3.6	7.7	6.0	6.8	15.2	13.7	14.5	21.1	14.1	17.5
19	5.5	4.5	4.9	8.7	6.6	7.2	14.0	12.6	13.2	22.5	16.5	19.6
20	5.7	4.6	5.1	8.7	7.0	7.6	13.6	11.5	12.3	20.2	14.5	17.8
21	5.7	5.0	5.4	8.4	7.2	7.5	11.5	10.0	10.6	17.9	14.8	16.3
22	5.6	5.2	5.4	7.6	6.3	6.9	12.3	10.4	11.1	20.7	14.6	17.1
23	6.1	5.3	5.5	6.7	4.8	5.7	13.3	11.3	11.9	20.1	12.6	16.8
24	6.4	5.4	5.9	7.0	4.8	6.0	14.1	12.4	13.3	16.9	10.3	12.3
25	6.2	4.1	5.2	4.8	2.6	3.5	13.8	12.0	12.8	13.4	10.5	11.5
26	4.1	3.6	3.9	7.9	4.1	5.1	15.1	11.9	12.8	13.7	13.1	13.3
27	4.1	2.9	3.4	9.2	5.9	7.2	13.8	13.1	13.4	16.9	13.7	15.7
28	3.9	3.4	3.7	10.3	8.5	9.4	14.3	12.9	13.3	17.4	16.6	16.8
29	---	---	---	11.6	8.4	10.2	14.6	13.9	14.1	22.4	17.4	19.0
30	---	---	---	12.4	9.0	10.7	14.7	14.3	14.4	29.2	17.2	23.0
31	---	---	---	12.4	9.0	11.3	---	---	---	28.4	20.1	23.8
MONTH	6.4	1.3	3.5	12.4	1.8	6.1	16.0	2.6	12.4	29.2	10.3	16.3
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	27.7	19.0	20.7	25.8	24.5	25.1	26.6	21.3	23.8	---	---	---
2	20.5	18.4	19.7	29.1	25.0	25.9	22.9	19.7	21.1	---	---	---
3	22.0	19.2	20.3	26.2	24.4	25.0	26.6	23.2	24.3	---	---	---
4	21.3	18.2	19.4	25.3	23.8	24.5	29.7	21.8	26.0	---	---	---
5	18.3	16.6	17.4	24.4	23.5	23.9	---	---	---	---	---	---
6	21.4	17.0	18.7	25.2	24.4	24.8	---	---	---	---	---	---
7	22.1	19.9	20.9	25.2	23.9	24.4	---	---	---	---	---	---
8	21.4	19.5	20.2	25.2	24.1	24.7	---	---	---	---	---	---
9	21.5	20.1	20.6	28.0	24.8	26.4	---	---	---	---	---	---
10	22.9	20.6	21.7	28.2	25.8	26.6	23.9	21.3	21.8	---	---	---
11	23.8	20.3	21.3	27.6	24.7	25.5	22.4	21.4	21.7	22.0	17.6	20.3
12	24.2	21.0	22.0	27.7	25.0	25.9	24.4	21.8	23.4	27.1	17.1	20.6
13	23.6	20.5	22.3	27.1	25.8	26.3	23.8	19.6	21.8	24.3	17.3	20.2
14	23.6	19.8	21.6	27.1	24.5	25.5	28.3	19.3	23.3	22.1	17.2	19.7
15	23.5	19.1	21.5	26.3	24.1	25.0	25.3	20.2	23.1	25.3	15.3	19.8
16	23.8	20.1	21.8	25.0	23.9	24.5	28.5	20.3	23.6	25.7	15.2	19.9
17	23.7	19.6	21.3	26.9	23.2	24.8	23.0	16.2	19.9	25.8	15.7	19.6
18	23.1	21.4	22.1	27.6	23.6	25.4	24.5	17.1	20.2	18.9	15.5	17.4
19	26.1	22.6	24.1	28.1	24.2	26.3	27.7	19.1	23.3	16.8	12.7	14.8
20	24.8	21.5	22.6	26.9	22.6	24.8	---	---	---	22.1	13.0	16.6
21	21.7	20.4	21.0	25.7	22.6	24.0	---	---	---	21.5	14.9	17.9
22	21.7	20.8	21.1	25.0	22.9	24.0	29.6	21.3	25.0	21.5	12.4	16.2
23	21.6	19.8	20.5	25.7	23.1	24.1	27.2	21.9	25.0	19.8	13.7	15.9
24	23.7	20.7	21.4	27.2	23.6	24.8	26.9	21.6	24.4	24.7	---	---
25	23.8	21.4	22.5	28.6	25.7	26.9	29.0	22.1	25.4	19.4	14.5	16.6
26	23.2	21.3	22.2	27.3	22.9	24.5	---	---	---	21.4	14.1	16.6
27	24.3	22.5	23.3	25.6	23.4	24.4	22.9	18.3	20.8	---	13.4	---
28	24.7	23.1	23.8	27.4	24.2	25.3	24.8	21.1	22.5	---	---	---
29	24.5	22.9	23.4	26.6	24.0	25.1	---	---	---	20.2	12.2	15.6
30	25.5	24.0	24.9	26.3	22.8	24.7	---	---	---	22.6	11.5	15.9
31	---	---	---	27.2	22.3	24.6	---	---	---	---	---	---
MONTH	27.7	16.6	21.5	29.1	22.3	25.1	---	---	---	---	---	---

07120500 ARKANSAS RIVER NEAR ROCKY FORD, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°03'55", long 103°41'08", in SE¹/₄NW¹/₄ sec.9, T.23 S., R.56 W., Otero County, Hydrologic Unit 11020005, on right bank 250 feet upstream from Hwy 266 bridge, and 1.6 mi northeast of Rocky Ford.

DRAINAGE AREA.--11,090 mi², of which 54 mi² is probably noncontributing.

PERIOD OF RECORD.--January to September 2002.

REMARKS.--Additional water-quality data were collected as part of a water-quality assessment of drought conditions and are published in the "Drought Synoptic Sampling" section of this report.

WATER-QUALITY DATA COLLECTED AS PART OF PREFERRED STORAGE OPTIONS PLAN, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L) AS CA (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) AS MG (00925)	POTAS-SIUM, DIS-SOLVED (MG/L) AS K (00935)	SODIUM, DIS-SOLVED (MG/L) AS NA (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L) AS CACO3 (90410)	CHLO-RIDE, DIS-SOLVED (MG/L) AS CL (00940)	FLUO-RIDE, DIS-SOLVED (MG/L) AS F (00950)
JAN													
11...	1100	43	12.0	8.4	1680	5.0	189	64.1	3.63	116	233	38.8	1.1
MAR													
12...	1300	27	10.2	8.3	1720	15.0	177	63.4	3.86	112	198	43.7	1.1
MAY													
22...	1415	110	8.0	8.3	1420	24.0	134	48.5	4.54	93.2	193	34.2	1.0
JUL													
23...	1600	20	8.2	8.5	2170	30.5	192	79.2	6.59	210	--	78.5	1.6

SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)

Date	Sulfate (MG/L) AS SO4 (00945)
JAN 11...	687
MAR 12...	676
MAY 22...	546
JUL 23...	929

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
FEB 07...	1200	30	1790	6.5	JUN 11...	1600	97	1120	32.0
APR 16...	1315	126	1630	19.5					

07121500 TIMPAS CREEK AT MOUTH NEAR SWINK, CO

LOCATION.--Lat 38°00'11", long 103°39'20", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.35, T.23 S., R.56 W., Otero County, Hydrologic Unit 11020005, on right bank at downstream side of 23rd Rd. Bridge, 1.7 mi southwest of Swink, and 2.9 mi upstream from mouth.

DRAINAGE AREA.--496 mi².

PERIOD OF RECORD.--January 1922 to September 1925, March 1968 to current year. Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS.--WDR CO 76-1: 1975.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,120 ft above sea level, from topographic map. Jan. 1922 to Sept. 1925 at several sites downstream at different datum. Mar. 1968 to May 29, 1975, at site 140 ft downstream at datum 0.13 ft lower. May 30, 1975 to Nov. 25, 1998, at site on left bank at same datum.

REMARKS.--No estimated daily discharges. Records good except for June 13 and July 16-17, which are fair. Natural flow of stream affected by erosion-control and livestock-watering reservoirs, diversions for irrigation, ground-water withdrawals, and return flows from irrigated areas and from Catlin and Rocky Ford Highline Canals. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1922, 21,400 ft³/s, June 17, 1965, gage height unknown.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	40	37	16	14	13	24	15	15	12	11	16
2	42	50	36	16	14	12	24	14	22	12	11	9.3
3	43	52	36	16	14	12	26	13	18	11	12	8.6
4	45	56	35	16	14	12	25	13	18	15	12	8.4
5	49	54	40	16	14	12	29	13	24	13	11	8.3
6	49	59	40	16	14	12	29	15	22	13	9.5	8.2
7	52	65	40	16	14	13	27	18	24	13	9.6	8.1
8	56	71	40	15	14	12	27	20	23	15	9.7	8.0
9	51	80	41	15	14	12	25	20	22	18	9.7	8.4
10	50	79	40	16	14	11	22	21	20	13	9.6	9.4
11	55	78	37	15	14	11	21	21	23	15	9.4	9.4
12	58	64	36	15	14	11	20	23	22	14	9.3	9.0
13	60	61	18	15	14	11	19	20	113	15	9.5	8.9
14	62	57	17	15	14	25	19	18	39	16	9.4	12
15	68	55	17	14	14	59	22	21	24	13	9.1	12
16	70	50	17	14	14	114	23	22	17	13	9.0	16
17	72	49	16	14	14	78	21	21	15	11	8.6	14
18	71	46	17	14	15	49	19	19	14	12	8.8	10
19	72	44	16	14	17	26	19	19	13	11	8.7	9.4
20	66	44	16	14	16	21	22	16	15	11	8.9	8.9
21	66	45	17	14	14	20	28	19	16	12	8.9	8.7
22	59	45	17	14	14	24	20	25	13	13	8.8	8.8
23	54	49	16	14	14	22	16	15	13	12	8.7	8.7
24	52	47	16	14	14	24	14	16	16	13	8.8	8.7
25	55	45	16	14	16	28	17	15	20	12	8.9	8.5
26	54	42	16	14	14	27	19	17	17	13	8.8	8.6
27	54	41	16	14	14	24	17	24	14	13	8.6	8.8
28	54	39	16	14	13	24	17	18	15	13	8.6	9.0
29	52	38	16	15	---	28	17	14	15	13	8.8	8.1
30	54	38	16	15	---	27	17	15	15	13	9.4	7.7
31	60	---	16	15	---	24	---	14	---	11	45	---
TOTAL	1750	1583	770	459	399	798	645	554	657	404	329.1	287.9
MEAN	56.45	52.77	24.84	14.81	14.25	25.74	21.50	17.87	21.90	13.03	10.62	9.597
MAX	72	80	41	16	17	114	29	25	113	18	45	16
MIN	42	38	16	14	13	11	14	13	13	11	8.6	7.7
AC-FT	3470	3140	1530	910	791	1580	1280	1100	1300	801	653	571

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 2002, BY WATER YEAR (WY)

	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	89.24	76.95	34.55	23.09	30.40	59.84	64.62	76.96	80.57	73.04	84.43	71.51																																																																					
MAX	265	210	109	60.4	84.6	201	170	187	318	200	401	159																																																																					
(WY)	1924	1924	1971	1923	1924	1924	1924	1995	1923	1923	1923	1986																																																																					
MIN	27.4	30.4	9.80	7.87	11.4	24.8	11.0	14.0	21.9	13.2	10.6	9.68																																																																					
(WY)	1979	1992	1979	1975	1976	1981	1978	1981	2002	2002	2002	2002																																																																					

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1922 - 2002
ANNUAL TOTAL	19139	8636.0	
ANNUAL MEAN	52.44	23.66	63.99
HIGHEST ANNUAL MEAN			130
LOWEST ANNUAL MEAN			23.7
HIGHEST DAILY MEAN	198	May 17	114
LOWEST DAILY MEAN	12	Mar 10	7.7
ANNUAL SEVEN-DAY MINIMUM	14	Mar 8	8.3
MAXIMUM PEAK FLOW			a612
MAXIMUM PEAK STAGE			6.56
ANNUAL RUNOFF (AC-FT)	37960	17130	46360
10 PERCENT EXCEEDS	94	53	124
50 PERCENT EXCEEDS	52	16	49
90 PERCENT EXCEEDS	16	9.3	15

- a From rating curve extended above 247 ft³/s on basis of contracted-opening measurement of peak flow.
 b From contracted-opening measurement of peak flow.
 c From floodmark.

07123000 ARKANSAS RIVER AT LA JUNTA, CO

LOCATION.--Lat 37°59'26", long 103°31'55", in SE¹/₄NE¹/₄ sec.2, T.24 S., R.55 W., Otero County, Hydrologic Unit 11020005, on right bank at upstream side of bridge on State Highway 109 in La Junta, and 450 ft upstream from King Arroyo.

DRAINAGE AREA.--12,210 mi², of which 115 mi² is probably noncontributing.

PERIOD OF RECORD.--May to August 1889 and September 1893 to December 1895 (gage heights, discharge measurements, and flood data only), April to October 1903 and June to November 1908 (gage heights and discharge measurements only), April 1912 to current year. Monthly discharge only for some periods, published in WSP 1311. Published as "near La Junta" in 1903. Statistical summary computed for 1975 to current year subsequent to completion of Pueblo Dam. Water-quality data available, October 1961 to January 1962, February 1971 to February 1972, July 1977 to March 1984, August 1988, April 1990 to November 1994, July 1998 to current year.

REVISED RECORDS.--WSP 1341: Drainage area. WSP 1731: 1922.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 4,039.60 ft above sea level. See WSP 1711 or 1731 for history of changes prior to June 13, 1940. June 13, 1940 to June 6, 1967, water-stage recorder at site 300 ft upstream at present datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, power developments, transbasin and transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants. Flow partly regulated by Pueblo Reservoir (station 07099350) about 82 mi upstream since Jan. 9, 1974. Additional water-quality data were collected as part of a water-quality assessment of drought conditions and are published in the "Drought Synoptic Sampling" section of this report.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	107	93	e83	e70	65	22	9.6	9.7	21	34	18
2	58	74	86	e120	e70	e60	21	9.5	8.9	19	36	24
3	30	51	88	e123	69	e60	21	9.9	8.9	21	44	21
4	29	49	83	e135	67	e65	20	9.4	12	19	43	20
5	25	39	83	e135	74	e70	19	9.4	37	18	45	16
6	23	34	87	129	67	81	21	9.4	31	18	35	12
7	47	35	92	91	69	63	22	15	41	19	29	10
8	70	48	94	82	65	55	23	9.0	33	19	22	8.9
9	64	54	117	78	65	51	21	9.6	17	14	21	13
10	59	56	126	78	64	53	21	8.5	9.7	15	21	21
11	67	54	115	76	67	60	20	6.6	14	36	18	20
12	71	61	111	75	67	57	18	7.0	11	14	16	20
13	72	65	e100	74	67	57	15	7.9	13	14	11	20
14	67	59	e250	73	65	95	12	6.5	52	10	15	25
15	74	62	e200	77	66	47	11	5.5	58	12	20	29
16	87	27	140	78	65	47	10	5.9	35	18	13	39
17	95	23	116	79	62	63	12	10	26	21	11	34
18	113	23	95	74	59	36	15	6.9	18	21	9.9	21
19	120	131	87	72	63	32	12	6.8	16	24	12	22
20	120	171	84	72	65	32	12	e20	18	27	10	20
21	117	145	84	74	63	30	9.8	33	14	29	10	20
22	104	136	87	78	63	31	9.4	16	11	29	9.8	21
23	75	149	89	73	65	31	8.8	11	12	30	9.3	21
24	54	144	101	e65	63	33	7.3	23	12	29	9.4	20
25	56	143	94	e60	67	35	8.1	46	16	23	9.4	21
26	83	130	97	59	e66	36	10	27	11	21	9.4	e21
27	103	95	92	60	e65	30	10	56	9.7	21	9.4	e21
28	129	85	102	54	65	22	12	32	9.9	24	9.7	e21
29	125	89	111	65	---	25	10	19	11	20	12	e21
30	116	125	e100	e65	---	27	9.8	14	25	21	16	e21
31	120	---	e85	e65	---	23	---	10	---	25	21	---
TOTAL	2452	2464	3289	2522	1843	1472	443.2	469.4	600.8	652	591.3	621.9
MEAN	79.1	82.1	106	81.4	65.8	47.5	14.8	15.1	20.0	21.0	19.1	20.7
MAX	129	171	250	135	74	95	23	56	58	36	45	39
MIN	23	23	83	54	59	22	7.3	5.5	8.9	10	9.3	8.9
AC-FT	4860	4890	6520	5000	3660	2920	879	931	1190	1290	1170	1230

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2002, BY WATER YEAR (WY)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	166	126	121	163	153	110	134	572	876	513	323	120																
MAX	1189	545	335	569	620	517	821	3375	4307	3634	1345	464																
(WY)	1985	1987	1987	1998	1985	1998	1998	1999	1995	1995	1984	1982																
MIN	8.82	4.21	13.5	9.50	6.37	19.6	6.67	15.1	20.0	21.0	19.1	9.59																
(WY)	1978	1979	1976	1976	1976	1978	1978	2002	2002	2002	2002	1977																

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1975 - 2002

ANNUAL TOTAL	55393	17420.6	
ANNUAL MEAN	152	47.7	a282
HIGHEST ANNUAL MEAN			832
LOWEST ANNUAL MEAN			47.7
HIGHEST DAILY MEAN	1250	Jul 16	e250 Dec 14
LOWEST DAILY MEAN	23	Oct 6	5.5 May 15
ANNUAL SEVEN-DAY MINIMUM	28	Apr 17	6.8 May 10
MAXIMUM PEAK FLOW			e390 Dec 14
MAXIMUM PEAK STAGE			g7.07 Dec 14
ANNUAL RUNOFF (AC-FT)	109900	34550	f15.55 May 2 1999
10 PERCENT EXCEEDS	371	100	204400
50 PERCENT EXCEEDS	93	33	604
90 PERCENT EXCEEDS	40	9.9	99
			21

- e Estimated.
- a Average discharge for 61 years (water years 1913-73), 244 ft³/s; 176,800 acre-ft/yr, prior to completion of Pueblo Dam.
- b Maximum daily discharge for period of record, 61,100 ft³/s, Jun 4, 1921.
- c Also occurred Dec 9, 1978; minimum daily discharge for period of record, no flow, Jan 20-23 and Mar 20-23, 1915.
- d Peak discharge includes 7,600 ft³/s (estimated) that bypassed the main channel; maximum discharge for period of record, 200,000 ft³/s, Jun 4, 1921, from rating curve extended above 15,000 ft³/s on basis of slope-area measurement of peak flow.
- f Gage height reflects the discharge flowing in the main channel; maximum gage height for period of record, 18.4 ft, Jun 4, 1921, site and datum then in use.
- g Backwater from ice.

ARKANSAS RIVER BASIN

07124000 ARKANSAS RIVER AT LAS ANIMAS, CO

LOCATION.--Lat 38°04'51", long 103°13'09", in SE¹/₄NE¹/₄ sec.3, T.23 S., R.52 W., Bent County, Hydrologic Unit 11020009, on right bank at upstream side of bridge on U.S. Highway 50, 1.1 mi north of courthouse in Las Animas, and 4.2 mi upstream from Purgatoire River.

DRAINAGE AREA.--14,417 mi², of which 441 mi² are probably noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May to November 1898 (gage heights only), August to November 1909 (gage heights and discharge measurements only), May 1939 to current year. Statistical summary computed for 1975 to current year, subsequent to partial regulation by Pueblo Reservoir.

REVISED RECORDS.--WSP 1341: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 3,883.97 ft above sea level. May 13 to Nov. 12, 1898, and Aug. 1 to Nov. 10, 1909, nonrecording gages near present site at different datums. May 23, 1939 to Apr. 27, 1967, water-stage recorder at site 0.4 mi downstream at datum 9.00 ft lower.

REMARKS.--Records fair except for Sept. 4-17, and estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, power developments, transbasin and transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants. Flow partly regulated by Pueblo Reservoir (station 07099350) about 104 mi upstream since Jan. 9, 1974.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	105	166	126	102	100	26	22	20	12	8.8	17
2	38	94	155	138	107	79	26	22	19	12	8.7	15
3	33	73	149	203	116	80	26	21	18	11	8.6	14
4	31	60	150	185	128	103	27	21	21	11	8.9	15
5	e30	53	150	222	126	186	28	21	21	11	8.8	15
6	e30	43	149	195	115	166	28	21	19	11	7.9	12
7	30	32	147	158	114	119	27	20	19	11	7.9	13
8	e32	28	144	146	114	104	27	20	17	11	8.1	14
9	39	26	149	141	110	99	27	20	17	10	8.2	14
10	e38	25	149	137	102	97	27	19	17	9.9	8.5	21
11	36	25	148	132	108	94	27	19	17	10	8.1	16
12	e37	26	146	127	111	97	27	19	16	10	7.8	14
13	e45	25	145	122	107	94	26	19	16	10	7.8	19
14	47	26	132	118	106	89	26	19	17	9.9	8.0	32
15	e49	75	283	114	105	88	25	18	17	9.8	7.7	23
16	e53	81	195	115	106	42	23	19	17	9.3	7.7	19
17	59	71	171	119	108	40	24	19	16	9.3	7.5	18
18	64	68	161	119	107	43	23	19	17	9.5	8.0	19
19	73	67	154	122	105	35	23	19	16	9.4	8.3	18
20	82	153	146	122	101	36	25	19	16	9.3	8.2	19
21	90	182	143	122	102	36	25	19	16	9.9	8.1	15
22	97	170	144	123	97	33	24	19	16	10	8.5	15
23	93	183	141	119	101	31	23	19	16	9.7	8.3	15
24	79	197	142	114	102	30	23	21	16	9.8	8.7	14
25	69	181	140	116	102	30	23	22	16	9.3	8.5	14
26	65	175	138	122	102	29	24	22	16	9.4	8.0	14
27	77	166	135	121	102	28	23	20	15	9.3	8.2	14
28	91	e146	134	117	102	27	24	20	14	9.4	e22	13
29	101	e155	131	117	---	27	23	20	13	9.1	148	e13
30	100	159	128	115	---	27	22	20	12	8.8	36	14
31	100	---	130	112	---	27	---	21	---	8.8	22	---
TOTAL	1855	2870	4695	4159	3008	2116	752	619	503	309.9	449.8	488
MEAN	59.84	95.67	151.5	134.2	107.4	68.26	25.07	19.97	16.77	9.997	14.51	16.27
MAX	101	197	283	222	128	186	28	22	21	12	148	32
MIN	30	25	128	112	97	27	22	18	12	8.8	7.5	12
AC-FT	3680	5690	9310	8250	5970	4200	1490	1230	998	615	892	968

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2002, BY WATER YEAR (WY)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	158.2	148.8	144.6	186.8	194.0	121.6	126.5	580.9	864.4	476.7	303.4	109.7																
MAX	1092	810	398	641	761	422	877	4043	4263	3339	1343	373																
(WY)	1985	1998	1998	1998	1985	1998	1987	1999	1995	1995	1999	1984																
MIN	5.13	6.05	8.40	8.45	18.5	9.44	10.8	14.1	16.8	10.0	14.5	9.12																
(WY)	1978	1975	1978	1978	1978	1975	1978	1981	2002	2002	2002	1977																

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1975 - 2002

ANNUAL TOTAL	60588	21824.7	
ANNUAL MEAN	166.0	59.79	a285.0
HIGHEST ANNUAL MEAN			841 1995
LOWEST ANNUAL MEAN			59.8 2002
HIGHEST DAILY MEAN	1620	Jul 16	283 Dec 15 b22600 May 3 1999
LOWEST DAILY MEAN	25	Nov 10	7.5 Aug 17 c3.0 Nov 30 1974
ANNUAL SEVEN-DAY MINIMUM	26	Nov 8	7.8 Aug 12 4.1 Sep 26 1977
MAXIMUM PEAK FLOW			394 Dec 15 d32900 May 2 1999
MAXIMUM PEAK STAGE			6.26 Dec 15 f14.02 May 2 1999
ANNUAL RUNOFF (AC-FT)	120200	43290	206500
10 PERCENT EXCEEDS	357	146	564
50 PERCENT EXCEEDS	133	27	116
90 PERCENT EXCEEDS	35	9.4	16

e Estimated.

a Average discharge for 34 years (water years 1940-73), 203 ft³/s; 147,100 acre-ft/yr, prior to completion of Pueblo Dam.b Maximum daily discharge for period of record, 25,800 ft³/s, May 20, 1955.c Minimum daily discharge for period of record, 0.9 ft³/s, Jul 31, Aug 1 and 3, 1964.d From rating curve extended above 21,600 ft³/s; maximum discharge and stage for period of record, 44,000 ft³/s, May 20, 1955, gage height, 15.03 ft, from current-meter measurement and slope-area measurement of over-flow channel, site and datum then in use.

f From floodmark.

07124000 ARKANSAS RIVER AT LAS ANIMAS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1985 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1985 to current year.

WATER TEMPERATURE: December 1985 to current year.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry.

REMARKS.--Daily specific-conductance records are fair except for Mar. 26 to Sept. 30, which are poor. Daily water-temperature records are good except for Feb. 20 to Mar. 7 and Apr. 26 to May 14, which are fair. Daily data that are not published are either missing or of unacceptable quality. Reported values are representative of the stream during steady flows based on cross-section comparisons made during the year at flows between 7.3 to 28 ft³/s. Additional water-quality data were collected as part of a water-quality assessment of drought conditions and are published in the "Drought Synoptic Sampling" section of this report.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 7,950 microsiemens/cm, Jan. 22, 1986; minimum, 310 microsiemens/cm, July 21, 1990.

WATER TEMPERATURE: Maximum, 35.3°C, July 8, 2002; minimum, 0.0°C, on many days.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 3,400 microsiemens/cm, Nov. 14; minimum, 609 microsiemens/cm, Aug. 29.

WATER TEMPERATURE: Maximum, 35.3°C, July 8; minimum, 0.0°C, on many days.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	2230	2170	2210	---	---	---	2480	2330	2400
2	---	---	---	2320	2160	2230	---	---	---	2400	2300	2360
3	3130	2970	3050	2630	2320	2470	---	---	---	2300	1870	2020
4	3170	3130	3140	2710	2630	2670	---	---	---	2100	1940	2040
5	3190	3140	3170	2740	2690	2710	2470	2420	2440	2010	1910	1960
6	3230	3170	3200	3160	2690	2840	2440	2380	2410	2070	1890	1970
7	3240	3210	3220	3310	3160	3230	2380	2300	2340	2230	2070	2160
8	3300	2940	3190	3260	3210	3250	2300	2260	2270	2380	2220	2290
9	2940	2750	2820	3280	3240	3260	2300	2240	2270	2410	2330	2370
10	2990	2750	2860	3310	3260	3280	2270	2220	2240	2410	2380	2400
11	3070	2920	2980	3260	3210	3240	2220	2190	2210	2460	2400	2430
12	3000	2710	2910	3230	3020	3140	2220	2160	2180	2460	2410	2440
13	2770	2600	2720	3250	3190	3230	2180	2120	2150	2480	2440	2460
14	2660	2600	2630	3400	2640	3240	2280	2100	2220	2520	2460	2480
15	2740	2590	2650	2640	2070	2110	2160	1610	1850	2590	2410	2510
16	2700	2450	2600	2140	2100	2120	1980	1640	1840	2600	2500	2540
17	2450	2360	2410	2330	2140	2250	2060	1920	2010	2600	2490	2530
18	2360	2250	2320	2450	2320	2380	2100	2060	2080	2590	2480	2530
19	2250	2050	2150	2440	2400	2410	2150	2080	2120	2570	2470	2510
20	2120	2070	2100	2400	1950	2140	2230	2140	2180	2550	2480	2510
21	2070	2000	2030	1960	1880	1910	2260	2200	2230	2560	2460	2510
22	2000	1960	1980	2030	1910	1960	2280	2190	2240	2520	2470	2490
23	2180	1950	2040	2030	2000	2020	2340	2260	2290	2490	2460	2470
24	2400	2170	2270	2060	1990	2020	2400	2290	2340	2520	2350	2470
25	2710	2400	2550	2190	2040	2100	2390	2340	2360	2580	2340	2420
26	2770	2620	2690	2320	2180	2270	2430	2330	2380	2380	2320	2350
27	2620	2330	2470	2330	2290	2310	2440	2400	2420	2320	2260	2270
28	2330	2180	2250	---	---	---	2460	2400	2420	2350	2260	2310
29	2180	2100	2130	---	---	---	2430	2390	2410	2360	2320	2340
30	2190	2110	2140	---	---	---	2440	2380	2410	2360	2330	2350
31	2230	2180	2210	---	---	---	2420	2370	2400	2440	2150	2340
MONTH	---	---	---	---	---	---	---	---	---	2600	1870	2360

ARKANSAS RIVER BASIN

07124000 ARKANSAS RIVER AT LAS ANIMAS, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN									
1	2520	2170	2370	2450	2370	2400	3280	3200	3240	3130	3040	3080
2	2490	2260	2390	2710	2420	2580	3250	3170	3220	3130	3050	3090
3	2500	2190	2350	2580	2370	2470	3300	3090	3230	3150	3050	3100
4	2420	2140	2280	2470	2120	2360	3300	3210	3260	3180	3090	3130
5	2420	2140	2310	2140	1650	1950	3240	3130	3190	3170	3090	3130
6	2490	2390	2430	2100	1620	1800	3200	3040	3150	3140	3070	3110
7	2500	2430	2460	2470	2100	2310	3230	3160	3190	3120	3060	3090
8	2620	2500	2580	2550	2460	2490	3220	3180	3210	3140	3060	3100
9	2600	2580	2590	2510	2390	2450	3240	3200	3220	3140	3050	3100
10	2780	2470	2620	2390	2300	2360	3230	3190	3210	3160	3060	3100
11	2630	2510	2570	2470	2270	2350	3220	3150	3190	3140	3080	3110
12	2560	2520	2540	2580	2440	2490	3210	3120	3180	3140	3080	3110
13	2600	2520	2540	2790	2560	2620	3200	3110	3160	3170	3070	3110
14	2590	2540	2560	2670	2540	2590	3230	3160	3190	3160	3090	3120
15	2600	2550	2560	2580	2290	2440	3240	3050	3160	3170	3110	3140
16	2610	2540	2560	3040	2580	2900	3280	3150	3210	3160	3070	3110
17	2620	2520	2570	3050	2710	2960	3230	3160	3200	3150	3040	3110
18	2540	2500	2520	2970	2410	2700	3290	3170	3230	3130	3090	3110
19	2530	2490	2520	3180	2970	3060	3250	3190	3220	3180	3100	3140
20	2540	2500	2520	3180	3100	3140	3200	3130	3170	3180	3110	3140
21	2570	2540	2550	3150	3080	3120	3220	3120	3170	3260	3120	3180
22	2570	2530	2550	3200	3100	3150	3210	3140	3170	3220	3160	3190
23	2550	2520	2540	3250	3130	3180	3220	3140	3180	3180	3140	3160
24	2530	2510	2520	3200	3150	3180	3170	3100	3130	3140	3050	3090
25	2520	2450	2490	3170	3120	3150	3150	3090	3120	3240	3110	3170
26	2580	2380	2470	3240	3110	3170	3130	3080	3100	3190	3140	3170
27	2550	2420	2460	3230	3190	3210	3190	3050	3120	3170	3090	3130
28	2460	2310	2410	3270	3170	3220	3180	3110	3150	3140	3030	3110
29	---	---	---	3270	3170	3230	3160	3090	3130	3140	3020	3090
30	---	---	---	3270	3160	3230	3150	3040	3100	3150	3100	3120
31	---	---	---	3260	3180	3240	---	---	---	3140	3100	3120
MONTH	2780	2140	2490	3270	1620	2760	3300	3040	3180	3260	3020	3120
DAY	MAX	MIN	MEAN									
1	3170	3100	3130	3300	3220	3250	3240	3110	3190	3270	3180	3230
2	3170	3100	3140	3280	3240	3250	3250	3140	3210	3320	3200	3260
3	3110	3080	3100	3300	3230	3260	3220	3110	3180	3300	3200	3250
4	3080	2990	3050	3280	3220	3250	3250	3140	3220	3210	3160	3180
5	3190	3070	3140	3240	3200	3220	3270	3160	3220	3220	3150	3190
6	3220	3130	3170	3230	3170	3210	3280	3160	3230	3250	3160	3200
7	3240	3130	3170	3250	3180	3220	3300	3180	3250	3270	3190	3230
8	3200	3140	3170	3240	3180	3200	3290	3190	3260	3270	3210	3240
9	3200	3150	3170	3260	3180	3220	3310	3110	3260	3240	2760	3160
10	3220	3160	3190	3270	3200	3230	3310	3170	3260	3010	2860	2920
11	3220	3170	3190	3230	3110	3190	3310	3230	3270	3040	2860	2970
12	3230	3180	3190	3250	3200	3220	3340	3270	3310	3070	3000	3020
13	3240	3150	3190	3260	3190	3210	3370	3290	3320	3050	1850	2830
14	3220	3140	3180	3260	3190	3220	3320	3250	3280	2850	1810	2560
15	3240	3080	3180	3280	3210	3240	3330	3250	3290	2950	2850	2910
16	3300	3000	3130	3270	3210	3240	3370	3240	3280	3040	2940	2990
17	3300	3060	3150	3270	3220	3250	3340	3250	3290	3030	3000	3020
18	3220	3030	3100	3260	3220	3240	3320	3240	3270	3010	2980	2990
19	3190	3020	3090	3280	3220	3250	3290	3230	3250	3050	2980	3010
20	3100	2990	3040	3270	3240	3260	3310	3220	3260	3060	2810	3020
21	3180	3020	3090	3260	3220	3230	3280	3220	3250	3080	2970	3050
22	3190	3060	3120	3240	3130	3210	3300	3160	3250	3100	3020	3060
23	3190	3090	3140	3250	3220	3240	3300	3230	3260	3110	2980	3060
24	3230	3160	3190	3240	3210	3230	3300	3240	3260	3100	3040	3080
25	3240	3190	3210	3250	3130	3210	3310	3240	3270	3120	3050	3090
26	3240	3200	3210	3250	3110	3210	3340	3230	3280	3100	3060	3080
27	3250	3190	3210	3240	3150	3210	3320	3250	3280	3100	3060	3080
28	3250	3180	3210	3240	3120	3200	3320	1390	2960	3150	3050	3100
29	3280	3200	3240	3240	3120	3200	2320	609	1180	3150	3070	3110
30	3280	3220	3250	3240	3100	3180	3040	2320	2790	3140	3090	3120
31	---	---	---	3250	3100	3180	3200	3040	3120	---	---	---
MONTH	3300	2990	3160	3300	3100	3220	3370	609	3160	3320	1810	3070

07124000 ARKANSAS RIVER AT LAS ANIMAS, CO--Continued

WATER TEMPERATURE (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	25.3	14.0	18.9	15.3	8.6	11.6	---	---	---	2.5	0.0	0.6
2	25.4	12.9	18.3	15.4	7.6	11.1	---	---	---	2.9	0.0	0.7
3	24.1	12.6	17.5	16.2	8.3	11.8	---	---	---	0.1	0.0	0.0
4	21.0	12.0	15.3	16.7	10.5	12.7	8.7	---	---	0.1	0.0	0.0
5	16.1	10.1	12.4	17.4	8.2	12.3	8.5	4.4	6.2	2.8	0.0	1.0
6	20.4	7.0	13.8	17.6	8.0	12.2	7.1	2.2	4.5	3.8	0.0	1.5
7	21.6	9.2	14.8	17.9	7.5	11.5	5.5	2.5	3.8	5.7	0.0	2.6
8	22.8	11.0	16.3	11.5	6.2	8.9	5.1	0.3	2.5	8.3	1.8	4.7
9	21.5	12.3	15.8	14.8	4.2	8.7	5.2	0.0	2.2	7.6	4.0	5.7
10	18.4	10.5	13.7	14.7	4.7	8.8	5.0	0.2	2.3	8.4	4.3	6.2
11	20.0	8.2	13.5	14.9	4.9	9.4	5.5	0.7	3.1	7.4	1.6	4.3
12	14.0	8.0	10.6	15.4	6.1	10.2	3.5	0.8	2.2	7.1	1.4	4.1
13	---	---	---	14.9	6.9	10.4	1.5	0.0	0.3	6.4	2.1	3.9
14	18.5	7.0	12.7	14.2	7.5	10.2	3.1	0.0	0.8	5.3	0.5	2.6
15	16.7	7.5	11.4	13.8	7.4	10.3	0.1	0.0	0.1	3.7	0.0	1.4
16	16.5	---	---	12.9	9.1	10.6	3.4	0.0	1.1	4.1	0.0	1.2
17	17.8	7.0	11.9	13.6	6.9	9.8	4.8	0.0	2.1	3.8	0.0	1.0
18	15.7	9.1	11.8	12.4	6.0	8.6	5.0	0.8	2.8	3.5	0.0	1.0
19	16.0	7.0	11.0	11.1	5.4	7.6	5.2	0.2	2.6	4.1	0.0	1.2
20	15.7	7.6	11.3	8.5	2.8	5.6	5.0	0.4	2.6	4.6	0.0	1.4
21	14.6	8.0	11.1	8.1	2.7	5.3	5.5	1.0	3.2	6.1	0.0	2.1
22	17.2	8.6	12.5	7.1	3.3	5.2	6.0	2.0	3.5	7.8	0.5	3.8
23	17.2	9.1	12.9	7.3	5.2	6.4	4.8	0.1	2.2	3.9	0.8	2.5
24	14.8	7.9	10.8	8.0	3.5	5.6	4.3	0.1	1.7	4.5	0.0	1.2
25	13.9	5.0	10.0	8.5	3.6	5.5	3.6	0.0	1.4	7.6	0.0	2.5
26	14.2	4.9	9.0	5.0	2.0	3.6	5.3	0.0	2.3	8.7	0.6	4.3
27	14.3	5.1	9.2	3.6	0.0	1.6	5.4	0.6	2.6	8.6	2.9	5.2
28	14.8	7.3	10.8	---	---	---	5.2	0.3	2.4	8.0	1.4	4.6
29	14.8	8.7	11.4	---	---	---	2.5	0.0	1.3	5.0	1.0	2.7
30	14.6	8.6	11.4	---	---	---	2.6	0.0	0.8	1.2	0.0	0.7
31	16.1	11.1	13.0	---	---	---	2.3	0.0	0.6	5.3	0.0	1.3
MONTH	---	---	---	---	---	---	---	---	---	8.7	0.0	2.5
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	5.2	0.0	1.3	4.2	0.5	1.6	21.9	6.1	13.4	23.9	10.8	15.7
2	4.3	0.0	1.2	6.5	0.5	1.8	11.3	5.0	7.6	24.1	9.3	15.0
3	6.2	0.0	1.9	7.4	0.5	2.4	16.7	2.5	7.9	27.1	9.7	17.4
4	6.2	0.0	1.9	11.4	0.5	4.1	20.4	2.0	10.0	25.6	10.1	16.8
5	4.1	0.0	1.6	9.3	1.0	4.9	22.0	5.0	12.4	29.0	10.4	18.6
6	7.3	0.0	3.4	12.6	3.1	7.4	21.6	8.4	14.0	29.0	11.1	19.1
7	9.2	0.4	4.4	12.1	3.8	7.6	20.8	9.4	14.2	26.5	12.5	17.9
8	9.6	2.2	5.5	12.3	3.2	7.2	18.9	---	---	23.7	10.8	15.8
9	5.1	0.0	2.4	10.4	0.0	4.7	25.4	8.0	15.3	23.4	8.4	15.0
10	7.9	0.0	2.5	12.0	1.8	6.8	15.6	10.2	12.8	24.7	9.1	15.6
11	8.6	0.0	3.5	13.8	5.0	8.8	23.8	8.5	14.4	26.7	12.9	17.5
12	7.5	1.7	4.1	15.2	4.8	9.5	22.3	9.0	15.1	22.6	10.7	16.0
13	8.9	0.2	4.0	16.6	6.6	10.8	25.9	10.1	16.9	27.3	9.0	17.1
14	6.6	2.4	4.1	15.0	6.1	8.9	26.3	9.9	17.3	21.5	11.2	15.6
15	9.5	1.1	4.8	11.1	4.4	6.9	26.3	10.0	16.7	28.5	10.9	18.4
16	9.8	0.6	4.9	13.9	3.4	7.4	20.4	10.1	14.7	26.0	11.6	17.5
17	9.5	3.0	6.1	15.4	2.0	8.0	25.7	7.9	15.3	22.5	11.8	15.9
18	11.7	5.2	8.0	16.9	3.6	9.1	24.2	8.2	15.4	29.4	11.8	18.9
19	11.7	6.2	8.1	17.6	3.6	9.2	20.4	6.6	11.7	28.5	12.4	19.2
20	11.5	3.7	7.5	19.4	3.0	10.3	10.0	7.4	8.5	26.7	12.3	18.4
21	11.2	4.4	7.4	10.4	1.3	5.3	21.0	5.3	12.5	25.4	12.9	18.2
22	12.8	2.2	7.1	15.3	1.1	7.1	25.1	6.4	14.7	28.2	10.8	18.8
23	11.9	5.4	8.6	17.6	3.2	9.0	24.2	7.3	15.4	25.7	11.5	17.3
24	12.1	5.5	8.3	7.4	3.3	5.7	22.8	8.5	14.6	13.1	9.8	11.5
25	7.1	0.4	3.7	11.4	1.6	5.5	16.1	6.7	10.8	27.1	7.3	16.1
26	8.0	0.4	2.7	19.1	1.3	9.1	20.4	6.6	12.7	28.7	11.9	19.5
27	9.2	0.4	3.5	21.7	4.1	11.8	23.0	10.2	15.3	27.8	13.8	19.6
28	10.9	0.4	4.6	21.2	5.3	12.2	27.3	7.8	16.5	30.4	12.6	20.6
29	---	---	---	20.3	5.5	11.8	24.2	9.9	16.2	30.4	13.6	21.0
30	---	---	---	21.8	5.3	12.3	28.3	9.2	17.2	32.4	14.6	22.5
31	---	---	---	21.0	5.4	12.2	---	---	---	34.3	15.7	23.6
MONTH	12.8	0.0	4.5	21.8	0.0	7.7	28.3	---	---	34.3	7.3	17.7

ARKANSAS RIVER BASIN

07124000 ARKANSAS RIVER AT LAS ANIMAS, CO--Continued

WATER TEMPERATURE (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	31.0	16.0	21.3	34.3	19.1	25.7	26.8	19.4	22.7	30.6	18.0	23.5
2	28.2	15.1	20.1	34.5	19.2	25.7	26.8	18.6	22.0	28.6	17.4	22.1
3	30.7	15.0	21.1	32.6	18.2	24.7	27.2	20.2	23.4	27.3	16.2	20.6
4	18.9	15.4	17.0	29.9	18.5	23.5	30.2	21.1	24.5	30.3	17.2	22.6
5	29.2	14.5	20.6	32.0	18.5	24.1	30.3	20.5	24.7	30.6	16.6	22.7
6	32.4	14.9	22.6	31.6	19.5	24.4	28.0	20.6	23.8	30.8	17.3	23.0
7	33.3	15.8	23.1	31.1	18.9	23.9	26.1	20.6	23.4	30.2	17.8	22.7
8	32.1	15.0	22.2	35.3	19.1	26.3	29.4	20.5	24.1	30.0	17.4	22.5
9	30.8	16.2	22.6	33.1	19.5	26.1	28.9	20.0	23.4	29.9	17.8	21.8
10	29.3	16.3	21.9	34.0	19.0	25.9	29.0	20.0	23.8	20.9	17.0	18.7
11	32.5	15.5	23.1	34.9	18.5	26.1	28.9	20.7	24.1	24.1	16.5	19.6
12	32.7	16.9	23.5	33.8	17.8	25.3	27.3	19.6	22.9	28.4	16.4	21.0
13	28.1	17.2	21.8	32.0	17.7	24.3	28.2	18.6	21.9	27.4	16.6	20.6
14	29.1	15.0	21.2	32.2	17.8	24.6	33.2	14.7	22.8	25.6	15.9	19.5
15	30.0	11.3	18.2	31.8	19.3	24.9	30.6	17.3	22.6	27.8	14.6	20.1
16	22.9	9.3	15.4	31.8	19.5	24.9	33.2	17.1	23.7	27.7	13.9	19.8
17	26.8	10.8	17.7	31.7	19.3	24.8	27.7	14.3	20.5	26.1	14.6	19.6
18	28.1	13.2	19.9	33.0	19.2	25.3	30.7	14.5	21.3	19.3	15.0	17.0
19	29.0	14.6	20.5	32.4	20.5	25.6	29.5	17.8	21.9	21.9	12.0	16.2
20	28.2	15.5	19.7	31.0	20.1	24.9	30.7	17.9	22.9	25.5	11.0	17.4
21	28.3	14.4	20.1	29.1	20.0	24.6	32.5	18.7	24.4	23.8	12.8	17.3
22	26.2	15.6	20.0	30.6	20.3	24.5	33.0	19.1	24.3	23.1	10.9	16.1
23	29.4	14.4	20.6	30.8	20.0	24.4	31.0	18.4	23.7	23.3	11.9	17.0
24	32.4	16.0	23.3	32.4	19.7	25.2	29.5	18.6	22.6	26.6	13.5	19.0
25	33.6	17.6	23.9	31.7	20.2	25.0	31.3	19.5	24.2	24.0	13.2	17.8
26	33.5	16.8	24.2	31.6	20.2	24.6	33.9	18.7	24.7	23.6	12.5	17.0
27	32.7	17.7	24.9	29.7	20.2	24.2	30.2	17.8	22.4	22.9	11.6	16.6
28	33.8	17.2	24.5	31.0	20.4	24.6	30.2	15.2	21.5	22.0	14.5	17.5
29	31.4	18.3	24.5	30.1	19.9	24.4	24.8	11.7	17.8	23.2	12.3	17.2
30	34.3	18.7	25.2	30.5	20.4	24.6	29.9	16.6	22.1	25.2	13.1	18.3
31	---	---	---	30.5	19.6	24.4	31.6	18.1	23.6	---	---	---
MONTH	34.3	9.3	21.5	35.3	17.7	24.9	33.9	11.7	23.0	30.8	10.9	19.5

07124200 PURGATOIRE RIVER AT MADRID, CO

LOCATION.--Lat 37°07'46", long 104°38'22", in SW¹/₄NE¹/₄ sec.35, T.33 S., R.65 W., Las Animas County, Hydrologic Unit 11020010, on left bank 70 ft downstream from county road bridge, 0.3 mi northeast of Madrid, 1.0 mi downstream from Burro Canyon, and 9 mi west of Trinidad.

DRAINAGE AREA.--505 mi².

PERIOD OF RECORD.--March 1972 to current year. Water-quality data available, October 1978 to September 1981. Daily record for water temperature and specific conductance available, March 1979 to July 1981. Daily record for suspended-sediment data available, October 1978 to September 1981.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Datum of gage is 6,261.61 ft above sea level (U.S. Army Corps of Engineers bench mark).

REMARKS.--Records good except for Sept. 9 and estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation and municipal use, ground-water withdrawals, and return flows from irrigated areas. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report. Additional water-quality data were collected as part of a water-quality assessment of drought conditions and are published in the "Drought Synoptic Sampling" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	14	e14	e9.0	e13	e16	11	12	12	11	5.1	1.7
2	20	15	e14	e10	e13	e16	11	12	11	8.7	3.9	2.0
3	19	15	e13	e11	e13	e16	11	13	11	9.2	23	8.5
4	19	15	e13	e12	e12	e17	11	13	13	11	20	3.3
5	18	15	e13	e13	e12	e16	12	13	16	18	24	2.2
6	18	15	e12	e14	e12	e16	12	13	15	23	15	1.8
7	16	15	e12	e15	e12	e16	13	12	13	46	11	1.4
8	16	15	e11	e15	e12	16	14	13	11	19	11	1.8
9	16	15	e11	e15	e13	14	13	13	9.1	15	9.6	49
10	16	15	e11	e14	e14	14	11	13	7.7	10	8.5	34
11	18	15	e11	e14	e15	15	12	12	6.6	16	7.0	17
12	18	15	e11	e13	e15	13	12	12	5.2	8.6	5.9	11
13	19	15	e10	e13	e16	13	12	14	5.5	6.5	5.3	9.1
14	18	15	e11	e12	e15	13	11	15	11	4.9	5.4	14
15	16	15	e12	e12	e16	13	9.8	14	6.8	4.2	5.0	12
16	15	16	e13	e12	e15	13	9.5	13	5.6	4.0	4.2	11
17	15	16	e13	e12	e15	13	9.4	15	5.4	4.2	3.3	9.4
18	15	16	e12	e12	e15	13	8.9	17	5.0	3.4	2.7	38
19	16	17	e11	e12	15	13	8.4	16	4.2	2.4	e38	133
20	15	17	e11	e12	14	12	9.4	19	4.3	2.1	e7.2	21
21	15	15	e10	e12	16	12	10	20	4.4	5.4	e3.3	14
22	15	16	e10	e12	15	12	9.6	17	4.6	25	4.0	11
23	15	17	e10	e12	17	12	9.1	15	9.8	20	3.9	9.4
24	15	19	e10	e12	15	11	9.1	16	8.7	9.4	4.3	13
25	15	16	e10	e12	15	13	9.8	17	11	5.3	3.2	16
26	15	e15	e10	e13	13	12	12	16	12	5.9	2.0	18
27	15	e14	e10	e13	13	11	12	15	8.4	5.3	1.7	18
28	15	e13	e10	e12	e16	10	12	15	17	5.8	2.1	18
29	15	e14	e10	e12	---	10	13	15	17	49	5.4	19
30	15	e14	e10	e11	---	11	13	14	14	23	4.2	19
31	15	---	e10	e12	---	10	---	12	---	6.1	2.6	---
TOTAL	508	459	349	385.0	397	412	331.0	446	285.3	387.4	251.8	536.6
MEAN	16.39	15.30	11.26	12.42	14.18	13.29	11.03	14.39	9.510	12.50	8.123	17.89
MAX	20	19	14	15	17	17	14	20	17	49	38	133
MIN	15	13	10	9.0	12	10	8.4	12	4.2	2.1	1.7	1.4
AC-FT	1010	910	692	764	787	817	657	885	566	768	499	1060

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2002, BY WATER YEAR (WY)

	1972	1973	1974	1975	1976	1977	1978	1979	2000	2001	2002	
MEAN	30.22	24.94	21.02	18.82	19.44	20.76	46.01	142.4	192.3	122.7	109.4	53.59
MAX	78.5	39.2	40.3	36.6	37.2	55.9	204	547	589	313	342	232
(WY)	1983	1999	1984	1984	1983	1987	1987	1999	1983	1983	1981	1981
MIN	9.89	12.7	8.47	7.60	5.80	9.72	10.9	14.4	9.52	12.5	8.12	11.0
(WY)	1973	1977	1977	1973	1977	1979	2002	2002	2002	2002	2002	1978

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1972 - 2002	
ANNUAL TOTAL	14040		4748.1			
ANNUAL MEAN	38.47		13.01		68.52	
HIGHEST ANNUAL MEAN					145	
LOWEST ANNUAL MEAN					13.0	
HIGHEST DAILY MEAN	255		133		1640	
LOWEST DAILY MEAN	e10		1.4		1.4	
ANNUAL SEVEN-DAY MINIMUM	e10		2.8		2.8	
MAXIMUM PEAK FLOW			464		a14300	
MAXIMUM PEAK STAGE			4.16		b12.80	
ANNUAL RUNOFF (AC-FT)	27850		9420		49640	
10 PERCENT EXCEEDS	90		17		173	
50 PERCENT EXCEEDS	21		13		29	
90 PERCENT EXCEEDS	14		5.3		13	

e Estimated.

a From timed-drift measurement of peak flow.

b From floodmarks.

07124400 TRINIDAD LAKE NEAR TRINIDAD, CO

LOCATION.--Lat 37°08'28", long 104°33'05", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.27, T.33 S., R.64 W., Las Animas County, Hydrologic Unit 11020010, in valve house near center of dam on Purgatoire River and 3.2 mi southwest of courthouse in Trinidad.

DRAINAGE AREA.--672 mi².

PERIOD OF RECORD.--August 1977 to current year.

REVISED RECORDS.--WDR CO-78-1: 1977(M). WDR CO-83-1: 1981-82 (contents). WDR CO-89-1: 1988 (contents).

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 6,073.64 ft above sea level (levels by U.S. Army Corps of Engineers); gage readings have been reduced to elevations above sea level.

REMARKS.--Reservoir is formed by a rock and earthfill dam completed in 1977. Storage began Aug. 19, 1977. Recreation pool reached June 4, 1979. All figures represent total contents from area-capacity table effective Nov. 1, 1999, and based on a 1999 resurvey by the U.S. Army Corp of Engineers. Total capacity at top of parapet wall, 180,000 acre-ft at elevation 6,284.00 ft. Maximum pool, 167,700 acre-ft at elevation 6,279.30 ft. Top of flood control storage, 123,200 acre-ft at elevation 6,260.00 ft. Capacity at high crest of spillway, 119,100 acre-ft at elevation 6,258.00 ft. Capacity at notch crest of spillway, 91,300 acre-ft at elevation 6,243.00 ft. Top of irrigation storage, 71,000 acre-ft at elevation 6,230.00 ft. Recreation pool, 14,895 acre-ft at elevation 6,171.86 ft. Elevation of no contents, 6,115.00 ft. No dead storage. Reservoir is used for flood control, recreation, storage for irrigation, and sediment retention.

COOPERATION.--Capacity tables provided by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 72,800 acre-ft, Aug. 8, 1999, elevation, 6,230.35 ft; minimum contents since recreation pool was reached, 4,260 acre-feet, Oct. 5, 1992, elevation, 6,142.41 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 18,500 acre-ft, Apr. 10, 14-15, maximum elevation, 6,177.83 ft, Apr. 10, 14; minimum contents, 12,600 acre-ft, on many days, minimum elevation, 6,167.31 ft, Sept. 8.

Capacity table (elevation, in feet, and contents, in acre-feet, effective Nov. 1, 1999)

6,150.0	5,660	6,180.0	19,900	6,210.0	45,800
6,155.0	7,320	6,185.0	23,400	6,215.0	51,500
6,160.0	9,220	6,190.0	27,200	6,220.0	57,600
6,165.0	11,400	6,195.0	31,400	6,225.0	64,100
6,170.0	13,900	6,200.0	35,800	6,230.0	71,000
6,175.0	16,700	6,205.0	40,600	6,235.0	78,400

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14100	e14800	e15600	16300	17100	17700	18300	17900	15000	13400	13000	12800
2	14100	e14800	e15600	16300	17100	17700	18300	17900	14900	13400	13000	12700
3	14100	e14900	15700	16300	17100	17700	18300	17900	14800	13400	13100	12700
4	14100	e14900	15700	16400	17200	17700	18300	17800	14700	13300	13100	12700
5	14100	e14900	e15700	16400	17200	17800	18400	17800	14700	13300	13100	12600
6	14100	e14900	15700	16400	17200	17800	18400	17700	14600	13300	13000	12600
7	14200	15000	15700	16400	17200	17800	18400	17600	14600	13400	13000	12600
8	14200	15000	e15800	16500	17200	17900	18400	17600	14500	13300	13000	12600
9	14200	15000	e15800	16500	17200	17900	18400	17500	14500	13200	13000	12700
10	14200	e15000	e15800	16600	17200	17900	18400	17400	14400	13200	13000	12800
11	14300	e15100	e15800	16600	17200	17900	18400	17400	14400	13200	13000	12700
12	14300	e15100	15800	16600	17200	18000	18400	17300	14300	13200	13000	12600
13	14300	15100	15800	16600	17200	18000	18400	17200	14300	13200	12900	12600
14	14400	15200	e15800	16600	17300	18000	18400	17000	14300	13100	12900	12600
15	14400	15200	e15900	16700	17300	18000	18400	16900	14200	13100	12900	12600
16	14400	15200	e15900	16700	17300	18000	18400	16700	14200	13100	12900	12600
17	14400	15300	16000	16700	17300	18100	18400	16600	14100	13100	12900	12600
18	14400	15300	16000	16700	17400	18100	18400	16500	14100	13100	12800	12800
19	14500	15300	16000	16800	17400	18100	18400	16400	14000	13100	12900	13300
20	14600	e15400	16000	16800	17400	18100	18300	16300	14000	13000	12900	13100
21	14600	e15400	16100	16800	17500	18100	18300	16200	13900	13100	12800	13000
22	14500	15400	16100	16800	17500	18100	18200	16100	13900	13200	12800	13000
23	14600	e15400	16100	16900	17500	18100	18200	16000	13800	13200	12800	13000
24	14600	e15500	16100	16900	17600	18200	18100	15900	13800	13100	12800	13000
25	14600	15500	16100	16900	17600	18200	18100	15800	13700	13100	12800	13000
26	14600	e15500	16100	16900	17600	18200	18100	15700	13700	13100	12800	13100
27	14600	15500	16200	17000	17600	18200	18100	15600	13600	13100	12800	13100
28	14700	15600	16200	17000	17600	18200	18000	15500	13600	13100	12800	13100
29	14700	15600	16200	17000	---	18200	18000	15400	13500	13200	12800	13200
30	e14700	e15600	16200	17100	---	18300	18000	15300	13500	13200	12800	13200
31	e14700	---	16300	17100	---	18300	---	15200	---	13100	12800	---
MAX	14700	15600	16300	17100	17600	18300	18400	17900	15000	13400	13100	13300
MIN	14100	14800	15600	16300	17100	17700	18000	15200	13500	13000	12800	12600

e Estimated.

07124410 PURGATOIRE RIVER BELOW TRINIDAD LAKE, CO

LOCATION.--Lat 37°08'38", long 104°32'50", in NE¹/₄SW¹/₄ sec.27, T.33 S., R.64 W., Las Animas County, Hydrologic Unit 11020010, on left bank of flip bucket outlet 500 ft downstream from base of Trinidad Dam (revised), 0.8 mi upstream from Santa Fe Railroad bridge, and 3.0 mi southwest of courthouse in Trinidad.

DRAINAGE AREA.--672 mi².

PERIOD OF RECORD.--December 1976 to current year. Suspended-sediment data available, March 1977 to September 1984.

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Datum of gage is 6,073.64 ft above sea level (levels by U.S. Army, Corps of Engineers). Supplementary water-stage recorder about 1,000 ft downstream at same datum, for use when flows exceed approximately 1,500 ft³/s.

REMARKS.--No estimated daily discharges. Records good except for those below 0.5 ft³/s, which are fair. Natural flow of stream affected by storage reservoirs, diversions for irrigation and municipal use, ground-water withdrawals, and return flows from irrigated areas. Flow completely regulated by Trinidad Lake (station 07124400) immediately upstream since Aug. 19, 1977. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	0.38	4.5	0.25	0.58	0.33	0.55	22	58	20	21	22
2	19	0.39	4.1	0.25	0.61	0.33	0.51	23	58	16	2.6	22
3	23	0.38	4.1	0.42	0.68	0.33	0.51	20	58	20	1.5	14
4	25	0.38	3.9	0.51	3.9	0.33	0.51	21	58	21	1.4	16
5	9.2	0.38	3.6	0.51	8.5	0.35	0.51	22	40	22	24	8.7
6	1.1	0.38	3.0	0.51	8.5	0.33	0.51	48	36	23	36	6.4
7	1.1	0.38	3.0	0.51	8.8	0.32	0.49	44	33	23	26	10
8	1.0	0.38	3.0	0.51	12	0.31	4.6	33	30	36	13	9.0
9	0.94	0.38	2.8	0.51	14	0.33	6.0	33	30	39	9.0	8.5
10	0.87	0.38	2.7	0.51	7.1	0.29	7.6	33	27	18	9.0	33
11	0.82	0.38	2.7	0.51	8.0	0.23	9.5	33	26	9.0	9.0	59
12	0.77	0.38	2.7	0.51	11	0.22	9.5	33	22	9.0	9.4	33
13	0.77	0.38	1.1	0.51	11	0.20	9.5	61	22	9.0	9.5	14
14	0.77	0.38	0.33	0.51	6.6	0.15	8.8	80	23	9.0	9.5	15
15	0.77	0.38	0.33	0.51	0.38	0.40	8.5	84	41	7.3	9.5	17
16	0.77	0.44	0.33	0.51	0.38	0.68	8.5	70	32	4.7	6.8	15
17	0.77	0.44	0.33	0.51	0.38	0.68	8.5	61	27	3.8	4.9	5.0
18	0.77	0.44	0.33	0.52	0.38	0.68	6.9	60	28	3.6	4.6	0.22
19	0.77	0.44	0.33	0.51	0.38	0.68	8.8	59	28	3.5	4.9	17
20	0.69	0.44	0.33	0.51	0.38	0.68	25	62	28	3.5	9.0	130
21	0.68	0.44	0.27	0.51	0.38	2.7	33	63	26	3.5	10	61
22	0.68	0.44	0.27	0.56	0.38	3.4	32	63	26	12	6.1	0.06
23	0.62	0.44	0.27	0.68	0.38	3.1	24	63	27	39	4.1	0.06
24	0.54	0.44	0.27	0.68	0.38	2.5	21	63	31	39	4.1	0.06
25	0.51	0.39	0.27	0.63	0.38	1.3	18	63	33	18	4.1	0.06
26	0.51	3.7	0.27	0.58	0.38	0.73	17	63	30	7.2	2.6	0.06
27	0.51	5.2	0.27	0.58	0.36	0.68	16	63	30	5.7	2.2	0.06
28	0.51	4.9	0.27	0.58	0.33	0.68	17	60	36	5.7	2.5	0.06
29	0.51	4.7	0.27	0.58	---	0.67	20	58	38	5.7	1.5	0.06
30	0.51	4.5	0.27	0.58	---	0.62	22	58	32	37	6.3	0.06
31	0.48	---	0.27	0.58	---	0.58	---	58	---	54	9.0	---
TOTAL	121.94	33.06	46.48	16.14	106.52	24.81	345.29	1577	1014	527.2	273.1	516.36
MEAN	3.934	1.102	1.499	0.521	3.804	0.800	11.51	50.87	33.80	17.01	8.810	17.21
MAX	27	5.2	4.5	0.68	14	3.4	33	84	58	54	36	130
MIN	0.48	0.38	0.27	0.25	0.33	0.15	0.49	20	22	3.5	1.4	0.06
AC-FT	242	66	92	32	211	49	685	3130	2010	1050	542	1020

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2002, BY WATER YEAR (WY)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	23.35	5.432	2.398	2.608	2.964	2.925	31.12	162.4	199.3	172.0	146.6	111.2														
MAX	96.0	25.9	11.9	14.7	13.1	17.8	106	375	614	306	310	283														
(WY)	1984	1984	1979	1977	1977	1977	2000	1994	1983	1983	1999	1984														
MIN	0.35	0.015	0.001	0.012	0.046	0.007	0.073	25.5	33.9	17.0	8.87	5.15														
(WY)	1989	1982	1995	1985	2001	1982	1984	1980	2002	2002	2002	1987														

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1977 - 2002

ANNUAL TOTAL	21328.28	4601.90		
ANNUAL MEAN	58.43	12.61	74.14	
HIGHEST ANNUAL MEAN			146	1983
LOWEST ANNUAL MEAN			12.6	2002
HIGHEST DAILY MEAN	226	May 22	917	Sep 11 1981
LOWEST DAILY MEAN	0.00	Feb 21	a0.00	Aug 20 1977
ANNUAL SEVEN-DAY MINIMUM	0.00	Mar 1	0.06	Sep 22 1979
MAXIMUM PEAK FLOW			187	Sep 20 1981
MAXIMUM PEAK STAGE			5.94	Sep 20 1981
ANNUAL RUNOFF (AC-FT)	42300	9130	53710	
10 PERCENT EXCEEDS	212	36	241	
50 PERCENT EXCEEDS	2.7	3.5	9.0	
90 PERCENT EXCEEDS	0.00	0.33	0.04	

a No flow on many days during many years.
b From rating curve extended above 919 ft³/s.

07126140 VAN BREMER ARROYO NEAR TYRONE, CO

LOCATION.--Lat 37°23'58", long 104°06'55", in SW¹/₄SW¹/₄, sec.27, T.30 S., R.60 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Army Maneuver Site, on left bank 200 ft downstream from military road at gas line crossing near Brown Sheep Camp, 6 mi southeast of Tyrone, and 11 mi upstream from mouth.

DRAINAGE AREA.--132 mi², of which 11.8 mi² is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1985 to September 1998, October 1998 to current year (seasonal records only). Water-quality data available, July 1985 to May 1989. Daily records of specific conductance and water temperature available, May 1985 to April 1998.

REVISED RECORDS.--WDR CO-01-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry, crest-stage gages, and V-notch sharp-crested weir. Elevation of gage is 5,310 ft above sea level, from topographic map.

REMARKS.--Records good except for July 2, which is poor. Natural flow of stream affected by storage reservoirs, erosion-control and livestock-watering reservoirs, diversions for irrigation, ground-water withdrawals, and return flows from irrigated areas. Several measurements of specific conductance and water temperature, when obtained, are published in the "Supplemental Water-Quality Data for Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 511 ft³/s, Aug. 23, 1986, from flow through culvert computation, gage height, 10.02 ft; maximum gage height, 11.64 ft, Aug. 3, 1998; no flow on many days during most years (some estimated).

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 0.05 ft³/s, July 2, gage height, 4.31 ft; no flow on many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
16	e0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
17	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
18	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
19	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
20	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
21	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
22	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
23	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
24	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
26	---	---	---	---	---	e0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	---	---	---	---	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	---	---	---	---	---	---	0.000	0.000	0.000	0.000	0.000	0.000
MAX	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
MIN	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00

e Estimated.

07126140 VAN BREMER ARROYO NEAR TYRONE, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--June 1993 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published during period of operation are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 3.00 inches, Sept. 9, 1995.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.07 inches, June 4.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	---	---	---	---	---	0.00	0.00	0.00	0.81	0.10	0.00
3	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	---	---	---	---	---	0.00	0.00	1.07	0.00	0.00	0.00
5	0.02	---	---	---	---	---	0.00	0.00	0.14	0.00	0.00	0.00
6	0.01	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	---	---	---	---	---	0.10	0.01	0.00	0.00	0.00	0.00
9	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.36
10	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.65
11	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.04
12	0.08	---	---	---	---	---	0.18	0.00	0.00	0.00	0.00	0.00
13	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.15
14	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
16	e0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
17	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
18	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.10
19	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
20	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
21	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.03	0.00
22	---	---	---	---	---	---	0.00	0.00	0.00	0.62	0.09	0.00
23	---	---	---	---	---	---	0.00	0.00	0.01	0.00	0.00	0.00
24	---	---	---	---	---	---	0.00	0.09	0.02	0.00	0.00	0.00
25	---	---	---	---	---	---	0.00	0.00	0.35	0.01	0.00	0.00
26	---	---	---	---	---	e0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	---	---	---	---	---	0.00	0.16	0.00	0.00	0.00	0.00	0.00
28	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.45	0.00
29	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.05	0.05
30	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	---	---	---	---	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	0.44	0.10	1.59	1.44	0.72	1.35
MAX	---	---	---	---	---	---	0.18	0.09	1.07	0.81	0.45	0.65

e Estimated.

07126200 VAN BREMER ARROYO NEAR MODEL, CO

LOCATION.--Lat 37°20'44", long 103°57'27", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.13, T.31 S., R.59 W., Las Animas County, Hydrologic Unit 11020010, on right bank 3 mi upstream from mouth, 16 mi east of Model, and 33 mi northeast of Trinidad.

DRAINAGE AREA.--175 mi², of which 11.8 mi² is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1966 to current year.

REVISIONS.--WDR CO-84-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gages. Elevation of gage is 4,960 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records poor. Natural flow of stream affected by erosion-control and livestock-watering reservoirs, diversions for irrigation, ground-water withdrawals, and return flows from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.08	0.14	0.13	0.13	0.13	0.15	0.09	0.07	0.08	0.05	0.07	0.07
2	0.08	0.15	0.13	0.13	0.13	0.13	0.06	0.07	0.08	0.05	0.09	0.05
3	0.08	0.15	0.14	0.12	0.13	0.12	0.08	0.08	0.09	0.05	0.09	0.06
4	0.08	0.14	0.14	0.12	0.14	0.12	0.08	0.08	0.19	0.05	0.09	0.07
5	0.09	0.15	0.14	0.14	0.13	0.15	0.08	0.07	0.20	0.05	0.07	0.07
6	0.10	0.16	0.14	0.12	0.13	0.14	0.09	0.06	0.14	0.05	0.07	0.07
7	0.10	0.14	0.14	0.13	0.14	0.12	0.08	0.07	0.11	0.05	0.07	0.06
8	0.09	0.14	0.14	0.15	0.15	0.11	0.09	0.07	0.09	0.04	0.07	0.07
9	0.09	0.16	0.13	0.15	0.14	0.10	0.10	0.08	0.08	0.03	0.07	0.10
10	0.08	0.15	0.14	0.18	0.13	0.11	0.09	0.08	0.06	0.04	0.07	0.22
11	0.08	0.14	0.14	0.15	0.14	0.11	0.08	0.08	0.06	0.04	0.07	0.15
12	0.09	0.15	0.14	0.14	0.14	0.11	0.08	0.08	0.05	0.04	0.07	0.12
13	0.10	0.16	0.14	0.14	0.13	0.12	0.08	0.08	0.06	0.04	0.04	0.12
14	0.10	0.16	0.14	0.13	0.14	0.11	0.08	0.08	0.05	0.04	0.04	0.11
15	0.10	0.17	0.14	0.13	0.16	0.10	0.07	0.09	0.05	0.04	0.04	0.07
16	0.10	0.17	0.14	0.13	0.15	0.10	0.06	0.09	0.05	0.04	0.04	0.06
17	0.10	0.17	0.14	0.13	0.17	0.10	0.06	0.10	0.06	0.04	0.04	0.06
18	0.10	0.17	0.14	0.12	0.17	0.10	0.06	0.10	0.07	0.05	0.04	0.07
19	0.10	0.17	0.14	0.13	0.20	0.11	0.06	0.10	0.07	0.07	0.04	0.12
20	0.10	0.17	0.14	0.13	0.18	0.10	0.07	0.10	0.07	0.06	0.04	0.09
21	0.10	0.15	0.14	0.12	0.16	0.09	0.08	0.11	0.06	0.07	0.04	0.08
22	0.09	0.12	0.17	0.13	0.14	0.08	0.08	0.10	0.07	0.45	0.05	0.08
23	0.10	0.15	0.15	0.13	0.15	0.08	0.06	0.10	0.06	0.09	0.08	0.08
24	0.11	0.15	0.14	0.13	0.15	0.10	0.06	0.23	0.06	0.06	0.07	0.08
25	0.11	0.12	0.13	0.13	0.14	0.11	0.06	0.14	0.05	0.04	0.07	0.07
26	0.11	0.12	0.12	0.15	0.13	0.13	0.07	0.10	0.06	0.06	0.07	0.07
27	0.12	0.12	0.13	0.15	0.13	0.09	0.06	0.10	0.06	0.06	0.06	0.08
28	0.12	0.12	0.13	0.15	0.14	0.09	0.07	0.10	0.06	0.04	0.07	0.09
29	0.13	0.12	0.13	0.14	---	0.09	0.07	0.10	0.05	0.04	0.08	0.08
30	0.17	0.13	0.13	0.14	---	0.09	0.07	0.08	0.05	0.08	0.11	0.08
31	0.15	---	0.14	0.14	---	0.10	---	0.08	---	0.08	0.08	---
TOTAL	3.15	4.41	4.28	4.21	4.07	3.36	2.22	2.87	2.29	1.99	2.00	2.60
MEAN	0.102	0.147	0.138	0.136	0.145	0.108	0.074	0.093	0.076	0.064	0.065	0.087
MAX	0.17	0.17	0.17	0.18	0.20	0.15	0.10	0.23	0.20	0.45	0.11	0.22
MIN	0.08	0.12	0.12	0.12	0.13	0.08	0.06	0.06	0.05	0.03	0.04	0.05
AC-FT	6.2	8.7	8.5	8.4	8.1	6.7	4.4	5.7	4.5	3.9	4.0	5.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2002, BY WATER YEAR (WY)

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
MEAN	1.269	0.199	0.167	0.180	0.204	0.181	0.188	2.724	1.869	3.954	7.905	1.780															
MAX	16.0	0.74	0.32	0.43	0.59	0.40	0.74	30.1	20.6	36.4	104	9.90															
(WY)	1986	1998	1998	1973	1987	1973	1973	1981	1969	1977	1981	1972															
MIN	0.059	0.067	0.031	0.064	0.11	0.072	0.072	0.072	0.030	0.039	0.064	0.041															
(WY)	1992	1984	1984	1984	1992	1979	2002	1992	1968	1978	2002	1991															

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1966 - 2002

ANNUAL TOTAL	42.25	37.45		
ANNUAL MEAN	0.116	0.103	1.727	
HIGHEST ANNUAL MEAN			12.3	1981
LOWEST ANNUAL MEAN			0.10	2002
HIGHEST DAILY MEAN	0.32	Jul 4	0.45	Jul 22
LOWEST DAILY MEAN	0.05	Apr 30	0.03	Jul 9
ANNUAL SEVEN-DAY MINIMUM	0.05	Jul 30	0.04	Jul 8
MAXIMUM PEAK FLOW			1.2	Jul 22
MAXIMUM PEAK STAGE			1.30	Jul 22
ANNUAL RUNOFF (AC-FT)	84	74	1250	
10 PERCENT EXCEEDS	0.17	0.15	0.40	
50 PERCENT EXCEEDS	0.11	0.10	0.15	
90 PERCENT EXCEEDS	0.06	0.05	0.07	

a Also occurred Jun 8-13, 1968.

b From slope-area measurement of peak flow.

c From floodmarks. Maximum gage height, 9.98 ft, Aug 9, 1979, from floodmark.

07126200 VAN BREMER ARROYO NEAR MODEL, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1983 to April 1998, May 1999 to current year (seasonal peak flows only).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1983 to April 1998.

WATER TEMPERATURE: January 1983 to April 1998.

SUSPENDED SEDIMENT: May 1999 to current year (seasonal peak flows only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

REMARKS.--Daily suspended-sediment records are poor.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATION (seasonal peak flows only): Maximum daily mean, 1,720 mg/L, Aug. 5, 1999; minimum daily mean, 132 mg/L, June 12, 1999.

SUSPENDED-SEDIMENT DISCHARGE (seasonal peak flows only): Maximum daily, 4,000 tons (estimated), Aug. 3, 1999; minimum daily, 0.04 ton, (estimated), Aug. 15, 1999, and July 18, Aug. 25, 2000.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal peak flows only): No peak flows during the year.

SUSPENDED-SEDIMENT DISCHARGE (seasonal peak flows only): No peak flows during the year.

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT 23...	1315	.10	1920	16.0	JUN 18...	0945	.08	1970	20.0
DEC 20...	1330	.15	2050	4.5	JUL 18...	1015	.05	1820	20.0
FEB 26...	1530	.12	1980	7.5	30...	1230	.07	1980	25.5
MAR 29...	1430	.11	2130	16.0	AUG 26...	1440	.05	1960	26.5
MAY 17...	1115	.09	1960	15.5					

ARKANSAS RIVER BASIN

07126200 VAN BREMER ARROYO NEAR MODEL, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--June 1993 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published during period of operation are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 2.67 inches, May 25, 1996.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.20 inches, July 22.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	---	---	---	---	---	0.00	0.00	0.00	0.24	0.16	0.00
3	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.04
4	0.00	---	---	---	---	---	0.00	0.00	0.62	0.00	0.00	0.00
5	0.03	---	---	---	---	---	0.00	0.00	0.08	0.00	0.00	0.00
6	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	---	---	---	---	---	0.07	0.00	0.00	0.00	0.00	0.00
9	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.02	0.39
10	0.00	---	---	---	---	---	0.00	0.00	0.00	0.20	0.00	0.50
11	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.01
12	0.08	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	---	---	---	---	---	0.00	0.00	0.01	0.00	0.00	0.05
14	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.01
15	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00	0.00
18	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.37
19	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.01
20	0.00	---	---	---	---	---	0.00	0.02	0.01	0.00	0.01	0.00
21	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.02	0.00
22	0.00	---	---	---	---	---	0.00	0.00	0.00	1.20	0.29	0.00
23	e0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
24	---	---	---	---	---	---	0.00	0.54	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
26	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
27	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
28	---	---	---	---	---	e0.00	0.00	0.00	0.00	0.00	0.01	0.06
29	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.17	0.00
30	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	---	---	---	---	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	0.07	0.57	0.72	1.64	0.68	1.44
MAX	---	---	---	---	---	---	0.07	0.54	0.62	1.20	0.29	0.50

e Estimated.

07126300 PURGATOIRE RIVER NEAR THATCHER, CO

LOCATION.--Lat 37°21'23", long 103°53'59", in NW¹/₄SW¹/₄ sec.10, T.31 S., R.58 W., Las Animas County, Hydrologic Unit 11020010, on right bank 250 ft downstream from county road bridge at gas line crossing, 1.2 mi downstream from Van Bremer Arroyo, and 18 mi southeast of Thatcher.

DRAINAGE AREA.--1,791 mi², of which 11.8 mi² is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1966 to current year. Statistical summary computed for 1976 to current year, subsequent to completion of Trinidad Reservoir. Water-quality data available, October 1982 to November 1990. Daily records of specific conductance and water temperature available, December 1982 to April 1998. Daily records of suspended-sediment discharge data available, May 1983 to September 1992, March 1984 to September 1992.

REVISED RECORDS.--WDR CO-01-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gages. Elevation of gage is 4,790 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants. Peak flows regulated to some extent by Trinidad Lake (station 07124400) 52 mi upstream since January 1975. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data for Gaging Stations" section of this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of July 22, 1954 and May 19, 1955, reached stages of 26.7 and 25.2 ft, respectively, from floodmarks, discharges unknown. Flood of June 18, 1965, reached a stage of 23.5 ft, from floodmarks, discharge, 47,700 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	18	21	e13	e15	16	8.9	2.2	0.88	0.46	0.17	0.00
2	6.9	18	e22	e12	e15	15	9.2	2.4	0.54	0.24	0.10	0.00
3	6.8	18	e22	e13	e16	15	9.2	2.1	0.97	0.17	0.07	0.00
4	7.4	20	22	e13	e16	19	8.9	1.7	1.4	0.08	0.02	0.00
5	9.8	22	21	e14	e15	21	8.5	1.5	1.9	0.03	0.00	0.00
6	13	22	21	e14	e15	23	8.1	1.3	8.9	0.00	0.00	0.00
7	23	22	21	e15	e16	20	9.1	1.2	13	4.9	0.00	0.00
8	23	22	20	e16	e17	20	9.4	1.4	7.7	2.4	0.00	0.00
9	22	22	18	e15	e16	20	9.8	1.8	5.5	1.1	0.00	0.00
10	21	22	18	e14	e16	19	9.7	1.3	3.5	0.63	0.00	1140
11	20	22	e17	e14	e18	17	7.7	0.95	2.7	0.41	0.00	84
12	21	22	e17	e14	e17	16	6.8	0.82	2.4	0.17	0.00	23
13	21	22	e16	e14	e17	14	7.9	0.85	2.2	0.08	0.00	240
14	24	22	e16	e14	e18	13	7.8	1.1	1.4	0.00	0.00	199
15	22	22	e16	e14	e19	13	6.7	0.94	0.69	70	0.00	33
16	21	22	e15	e14	e20	12	6.7	0.87	0.34	46	0.00	12
17	20	23	e15	e14	21	11	6.4	1.0	0.22	6.6	0.00	6.5
18	20	21	e14	e15	21	11	5.3	1.0	0.12	2.5	0.00	4.3
19	20	20	e14	e15	22	11	4.1	1.1	0.04	1.00	0.00	538
20	19	19	e14	e15	23	10	3.2	1.2	0.00	0.32	0.00	140
21	18	19	e14	e15	23	9.2	3.2	1.4	276	0.21	0.00	90
22	19	18	e14	e16	22	8.6	2.8	0.97	33	232	0.00	89
23	18	20	e14	e15	21	9.4	2.4	0.86	11	79	0.00	20
24	17	21	e14	e14	20	11	2.8	1.1	6.3	17	0.00	9.6
25	17	21	e14	e15	21	12	3.9	1.3	33	22	0.00	6.3
26	17	22	e15	e16	19	12	5.3	0.97	16	7.3	0.00	4.8
27	16	23	e14	e16	14	11	4.1	0.88	7.4	3.9	0.00	3.8
28	19	19	e15	e16	15	12	2.9	1.3	3.9	2.2	0.00	3.0
29	17	18	e14	e16	---	13	2.2	4.7	2.0	1.3	0.00	2.0
30	17	e20	e13	e15	---	11	2.3	3.0	0.95	0.58	0.00	1.5
31	18	---	e13	e14	---	9.4	---	1.7	---	0.27	0.00	---
TOTAL	540.7	622	514	450	508	434.6	185.3	44.91	443.95	502.85	0.36	2649.80
MEAN	17.44	20.73	16.58	14.52	18.14	14.02	6.177	1.449	14.80	16.22	0.012	88.33
MAX	24	23	22	16	23	23	9.8	4.7	276	232	0.17	1140
MIN	6.8	18	13	12	14	8.6	2.2	0.82	0.00	0.00	0.00	0.00
AC-FT	1070	1230	1020	893	1010	862	368	89	881	997	0.7	5260

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2002, BY WATER YEAR (WY)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	
MEAN	34.05	32.31	28.82	28.03	29.85	36.71	83.88	129.6	91.75	84.72	133.7	59.25																
MAX	84.0	66.4	44.3	43.2	53.3	143	467	592	764	547	910	302																
(WY)	1986	1999	1987	1988	1987	1998	1983	1987	1983	1981	1981	1981																
MIN	0.73	3.71	12.1	10.6	11.5	5.97	1.38	1.46	6.69	8.80	0.012	0.64																
(WY)	1979	1979	1979	1978	1976	1977	1978	2002	1976	1989	2002	1978																

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1976 - 2002	
ANNUAL TOTAL	9818.58		6896.47			
ANNUAL MEAN	26.90		18.89			
HIGHEST ANNUAL MEAN					181	
LOWEST ANNUAL MEAN					12.3	
HIGHEST DAILY MEAN	609		1140		10000	
LOWEST DAILY MEAN	0.98		0.00		b0.00	
ANNUAL SEVEN-DAY MINIMUM	3.1		0.00		0.00	
MAXIMUM PEAK FLOW			c3620		d42400	
MAXIMUM PEAK STAGE			8.69		22.00	
ANNUAL RUNOFF (AC-FT)	19480		13680		46810	
10 PERCENT EXCEEDS	36		22		106	
50 PERCENT EXCEEDS	19		13		29	
90 PERCENT EXCEEDS	6.4		0.00		6.0	

e Estimated.

a Average discharge for 10 years (water years 1967-76), 37.9 ft³/s, 27,460 acre-ft/yr, prior to completion of Trinidad Dam.

b No flow at times during 1966, 1971-73, 1976, 1990, 2002.

c From rating curve extended above 2,020 ft³/s on basis of slope-area measurement of peak flow at gage height 12.25 ft.

d From rating curve extended above 2,020 ft³/s on basis of slope-area measurements of peak flow at gage heights 12.25 ft and 23.50 ft.

07126300 PURGATOIRE RIVER NEAR THATCHER, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 1999 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published during period of operation are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 2.79 inches, Aug. 21, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 0.62 inch, July 22.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	e0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	---	---	---	---	---	0.00	0.00	0.00	0.11	0.08	0.00
3	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.01	0.34
4	0.00	---	---	---	---	---	0.00	0.00	0.48	0.00	0.00	0.00
5	0.00	---	---	---	---	---	0.00	0.00	0.01	0.00	0.00	0.00
6	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	---	---	---	---	---	0.06	0.01	0.00	0.00	0.00	0.00
9	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.28
10	0.00	---	---	---	---	---	0.00	0.00	0.00	0.46	0.03	0.33
11	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	0.10	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	---	---	---	---	---	0.00	0.00	0.25	0.00	0.00	0.03
14	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.26
19	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.01	0.01
20	0.00	---	---	---	---	---	0.00	0.05	0.05	0.01	0.00	0.00
21	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.02	0.00
22	0.00	---	---	---	---	---	0.00	0.00	0.00	0.62	0.11	0.00
23	e0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.10	0.00
24	---	---	---	---	---	---	0.00	0.18	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	0.00	0.00	0.00	0.15	0.00	0.00
26	---	---	---	---	---	---	0.01	0.00	0.00	0.00	0.00	0.03
27	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
28	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.09	0.03
29	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.30	0.00
30	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
31	---	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	0.07	0.24	0.79	1.35	0.75	1.31
MAX	---	---	---	---	---	---	0.06	0.18	0.48	0.62	0.30	0.34

e Estimated.

07126325 TAYLOR ARROYO BELOW ROCK CROSSING NEAR THATCHER, CO

LOCATION.--Lat 37°25'27", long 103°55'11", in SE¹/₄SE¹/₄ sec.17, T.30 S., R.58 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site, on left bank 2.0 mi downstream from Rock Crossing, 5 mi upstream from mouth, and 13.5 mi southeast of Thatcher.

DRAINAGE AREA.--48.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1983 to September 1998, October 1998 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry, concrete control, and crest-stage gages. Elevation of gage is 4,982 ft above sea level, from topographic map.

REMARKS.--Records good. Natural flow of stream affected by erosion-control and livestock-watering reservoirs.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,090 ft³/s, Sept. 30, 1998, gage height, 13.71 ft, from slope-area measurement of peak flow; no flow on most days.

EXTREMES FOR CURRENT YEAR (seasonal only).--No flow during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
24	e0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
26	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
27	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
28	---	---	---	---	---	e0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	---	---	---	---	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	---	---	---	---	---	---	0.000	0.000	0.000	0.000	0.000	0.000
MAX	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
MIN	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00

e Estimated.

07126325 TAYLOR ARROYO BELOW ROCK CROSSING NEAR THATCHER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1983 to current year (during periods of flow).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1983 to April 1998.

WATER TEMPERATURE: April 1983 to April 1998.

SUSPENDED SEDIMENT: April 1983 to October 1998. May 1999 to current year (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

REMARKS.--Records for daily suspended sediment are good. Daily mean suspended-sediment concentrations published for days of partial flow might not reflect concentrations during the flow event.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 15,300 mg/L, Aug. 22, 1984; no flow most of the time.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 12,700 tons (estimated), Sept. 30, 1998; minimum, 0.0 ton, on many days; no flow on most days.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only): No flow during current year.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): No flow during current year.

--NO FLOW DURING 2002 WATER YEAR--

07126325 TAYLOR ARROYO BELOW ROCK CROSSING NEAR THATCHER, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--May 1999 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published during period of operation are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 3.23 inches, Aug. 21, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitaion, 0.63 inch, June 4.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	---	---	---	---	---	0.00	0.00	0.00	0.46	0.12	0.00
3	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.01	0.09
4	0.00	---	---	---	---	---	0.00	0.00	0.63	0.00	0.00	0.00
5	0.04	---	---	---	---	---	0.00	0.00	0.06	0.00	0.00	0.00
6	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	---	---	---	---	---	0.04	0.10	0.00	0.00	0.00	0.00
9	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.28
10	0.00	---	---	---	---	---	0.00	0.00	0.00	0.10	0.00	0.36
11	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	0.06	---	---	---	---	---	0.06	0.00	0.00	0.00	0.00	0.00
13	0.00	---	---	---	---	---	0.00	0.00	0.09	0.00	0.00	0.07
14	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.01
15	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.28
19	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.01	0.01
20	0.00	---	---	---	---	---	0.00	0.03	0.00	0.00	0.00	0.00
21	0.00	---	---	---	---	---	0.00	0.01	0.00	0.11	0.04	0.00
22	0.00	---	---	---	---	---	0.00	0.00	0.00	0.55	0.10	0.00
23	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
24	e0.00	---	---	---	---	---	0.00	0.20	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
26	---	---	---	---	---	---	0.01	0.00	0.00	0.00	0.00	0.00
27	---	---	---	---	---	---	0.01	0.00	0.00	0.00	0.00	0.00
28	---	---	---	---	---	e0.00	0.00	0.00	0.00	0.00	0.04	0.04
29	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.13	0.03
30	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	---	---	---	---	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	0.12	0.34	0.78	1.22	0.45	1.17
MAX	---	---	---	---	---	---	0.06	0.20	0.63	0.55	0.13	0.36

e Estimated.

07126390 LOCKWOOD CANYON CREEK NEAR THATCHER, CO

LOCATION.--Lat 37°29'34", long 103°49'39", in SW¹/₄NE¹/₄ sec.30, T.29 S., R.57 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site, on left bank 0.8 mi downstream from Sharp Ranch, 5.3 mi upstream from mouth, and 16 mi southeast of Thatcher.

DRAINAGE AREA.--49.2 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1983 to September 1992, October 1992 to May 1999 (annual maximum only), May 1999 to current year (seasonal records only). Records prior to May 14, 1999, may not be equivalent because of difference in drainage area.

REVISED RECORDS.--WDR CO-86-1: 1983-84. WDR CO-97-1: 1987(M).

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gages. Elevation of gage is 4,785 ft above sea level, from topographic map. April 1983 to May 2, 1989, at site 0.4 mile upstream at different datum. May 3, 1989 to May 13, 1999, at site 0.2 mile upstream at different datum.

REMARKS.--Records good except for June 13, which is poor. Natural flow of stream affected by erosion-control and livestock-watering reservoirs.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,110 ft³/s, May 22, 1987, from slope-area measurement of peak flow, gage height, 10.39 ft, site and datum then in use; no flow on most days.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 7.5 ft³/s, June 13, gage height, 6.73 ft, from rating curve extended above 0.09 ft³/s on the basis of step-backwater analysis of flow; no flow on most days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
2	0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
3	0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
4	0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
5	0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
6	0.00	---	---	---	---	---	e0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	---	---	---	---	---	0.00	0.00	0.94	0.00	0.00	0.00
14	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
26	e0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
27	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
28	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
29	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
30	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
31	---	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	---	0.00	0.94	0.00	0.00	0.00
MEAN	---	---	---	---	---	---	---	0.000	0.031	0.000	0.000	0.000
MAX	---	---	---	---	---	---	---	0.00	0.94	0.00	0.00	0.00
MIN	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
AC-FT	---	---	---	---	---	---	---	0.00	1.9	0.00	0.00	0.00

e Estimated.

07126390 LOCKWOOD CANYON CREEK NEAR THATCHER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1983 to September 1992, May 1999 to current year (seasonal records only).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 1983 to September 1992.
 WATER TEMPERATURE: June 1983 to September 1992.
 SUSPENDED SEDIMENT: May 1999 to current year (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry. June 1983 to September 1992, water-quality monitor at site 0.4 mi upstream.

REMARKS.--Daily suspended-sediment records are poor. Daily mean suspended-sediment concentrations published for days of partial flow might not reflect concentrations during the flow event including June 13.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 827 mg/L, June 13, 1999; minimum daily, 6 mg/L, Aug. 7, 1999.
 SUSPENDED SEDIMENT DISCHARGE (seasonal only): Maximum daily, 66 tons, June 13, 1999; minimum daily, 0.0 ton, on many days during 1999, no flow on most days.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 47 mg/L, June 13; No flow during the remainder of the year.
 SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 0.77 ton, June 13; No flow during the remainder of the year.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	0.00	---	---	---	---	---	---	---	---
2	0.00	---	---	---	---	---	---	---	---
3	0.00	---	---	---	---	---	---	---	---
4	0.00	---	---	---	---	---	---	---	---
5	0.00	---	---	---	---	---	---	---	---
6	0.00	---	---	---	---	---	---	---	---
7	0.00	---	---	---	---	---	---	---	---
8	0.00	---	---	---	---	---	---	---	---
9	0.00	---	---	---	---	---	---	---	---
10	0.00	---	---	---	---	---	---	---	---
11	0.00	---	---	---	---	---	---	---	---
12	0.00	---	---	---	---	---	---	---	---
13	0.00	---	---	---	---	---	---	---	---
14	0.00	---	---	---	---	---	---	---	---
15	0.00	---	---	---	---	---	---	---	---
16	0.00	---	---	---	---	---	---	---	---
17	0.00	---	---	---	---	---	---	---	---
18	0.00	---	---	---	---	---	---	---	---
19	0.00	---	---	---	---	---	---	---	---
20	0.00	---	---	---	---	---	---	---	---
21	0.00	---	---	---	---	---	---	---	---
22	0.00	---	---	---	---	---	---	---	---
23	0.00	---	---	---	---	---	---	---	---
24	0.00	---	---	---	---	---	---	---	---
25	0.00	---	---	---	---	---	---	---	---
26	e0.00	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---

e Estimated.

ARKANSAS RIVER BASIN

07126390 LOCKWOOD CANYON CREEK NEAR THATCHER, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	JANUARY			FEBRUARY			MARCH		
1	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	APRIL			MAY			JUNE		
1	---	---	---	0.00	---	---	0.00	---	---
2	---	---	---	0.00	---	---	0.00	---	---
3	---	---	---	0.00	---	---	0.00	---	---
4	---	---	---	0.00	---	---	0.00	---	---
5	---	---	---	0.00	---	---	0.00	---	---
6	e0.00	---	---	0.00	---	---	0.00	---	---
7	0.00	---	---	0.00	---	---	0.00	---	---
8	0.00	---	---	0.00	---	---	0.00	---	---
9	0.00	---	---	0.00	---	---	0.00	---	---
10	0.00	---	---	0.00	---	---	0.00	---	---
11	0.00	---	---	0.00	---	---	0.00	---	---
12	0.00	---	---	0.00	---	---	0.00	---	---
13	0.00	---	---	0.00	---	---	0.94	47	0.77
14	0.00	---	---	0.00	---	---	0.00	---	---
15	0.00	---	---	0.00	---	---	0.00	---	---
16	0.00	---	---	0.00	---	---	0.00	---	---
17	0.00	---	---	0.00	---	---	0.00	---	---
18	0.00	---	---	0.00	---	---	0.00	---	---
19	0.00	---	---	0.00	---	---	0.00	---	---
20	0.00	---	---	0.00	---	---	0.00	---	---
21	0.00	---	---	0.00	---	---	0.00	---	---
22	0.00	---	---	0.00	---	---	0.00	---	---
23	0.00	---	---	0.00	---	---	0.00	---	---
24	0.00	---	---	0.00	---	---	0.00	---	---
25	0.00	---	---	0.00	---	---	0.00	---	---
26	0.00	---	---	0.00	---	---	0.00	---	---
27	0.00	---	---	0.00	---	---	0.00	---	---
28	0.00	---	---	0.00	---	---	0.00	---	---
29	0.00	---	---	0.00	---	---	0.00	---	---
30	0.00	---	---	0.00	---	---	0.00	---	---
31	---	---	---	0.00	---	---	---	---	---
TOTAL	---	---	---	0.00	---	---	0.94	---	---

e Estimated.

07126390 LOCKWOOD CANYON CREEK NEAR THATCHER, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT
	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)
	JULY			AUGUST			SEPTEMBER		
1	0.00	---	---	0.00	---	---	0.00	---	---
2	0.00	---	---	0.00	---	---	0.00	---	---
3	0.00	---	---	0.00	---	---	0.00	---	---
4	0.00	---	---	0.00	---	---	0.00	---	---
5	0.00	---	---	0.00	---	---	0.00	---	---
6	0.00	---	---	0.00	---	---	0.00	---	---
7	0.00	---	---	0.00	---	---	0.00	---	---
8	0.00	---	---	0.00	---	---	0.00	---	---
9	0.00	---	---	0.00	---	---	0.00	---	---
10	0.00	---	---	0.00	---	---	0.00	---	---
11	0.00	---	---	0.00	---	---	0.00	---	---
12	0.00	---	---	0.00	---	---	0.00	---	---
13	0.00	---	---	0.00	---	---	0.00	---	---
14	0.00	---	---	0.00	---	---	0.00	---	---
15	0.00	---	---	0.00	---	---	0.00	---	---
16	0.00	---	---	0.00	---	---	0.00	---	---
17	0.00	---	---	0.00	---	---	0.00	---	---
18	0.00	---	---	0.00	---	---	0.00	---	---
19	0.00	---	---	0.00	---	---	0.00	---	---
20	0.00	---	---	0.00	---	---	0.00	---	---
21	0.00	---	---	0.00	---	---	0.00	---	---
22	0.00	---	---	0.00	---	---	0.00	---	---
23	0.00	---	---	0.00	---	---	0.00	---	---
24	0.00	---	---	0.00	---	---	0.00	---	---
25	0.00	---	---	0.00	---	---	0.00	---	---
26	0.00	---	---	0.00	---	---	0.00	---	---
27	0.00	---	---	0.00	---	---	0.00	---	---
28	0.00	---	---	0.00	---	---	0.00	---	---
29	0.00	---	---	0.00	---	---	0.00	---	---
30	0.00	---	---	0.00	---	---	0.00	---	---
31	0.00	---	---	0.00	---	---	---	---	---
TOTAL	0.00	---	---	0.00	---	---	0.00	---	---

e Estimated.

07126390 LOCKWOOD CANYON CREEK NEAR THATCHER, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--May 1999 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published during period of operation are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.71 inches, Aug. 10, 2001.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.28 inches, July 2.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
2	0.00	---	---	---	---	---	---	0.05	0.00	1.28	0.21	0.00
3	0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.02
4	0.00	---	---	---	---	---	---	0.00	0.49	0.00	0.00	0.00
5	0.04	---	---	---	---	---	---	0.00	0.03	0.00	0.00	0.00
6	0.00	---	---	---	---	---	e0.00	0.00	0.00	0.03	0.00	0.00
7	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	---	---	---	---	---	0.01	0.07	0.00	0.00	0.00	0.00
9	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.01	0.93
10	0.00	---	---	---	---	---	0.00	0.00	0.00	0.15	0.00	0.33
11	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	0.06	---	---	---	---	---	0.01	0.00	0.00	0.00	0.00	0.00
13	0.00	---	---	---	---	---	0.00	0.00	1.24	0.00	0.00	0.28
14	0.00	---	---	---	---	---	0.00	0.00	0.02	0.00	0.00	0.00
15	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.08
19	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	---	---	---	---	---	0.00	0.04	0.00	0.00	0.00	0.00
21	0.00	---	---	---	---	---	0.00	0.01	0.00	0.00	0.02	0.00
22	0.00	---	---	---	---	---	0.00	0.00	0.00	0.35	0.10	0.00
23	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	---	---	---	---	---	0.00	0.18	0.00	0.00	0.00	0.00
25	0.00	---	---	---	---	---	0.00	0.00	0.01	0.00	0.00	0.00
26	e0.00	---	---	---	---	---	0.01	0.00	0.00	0.00	0.00	0.00
27	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.02	0.00
28	---	---	---	---	---	---	0.00	0.00	0.07	0.00	0.05	0.00
29	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.26	0.06
30	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.01	0.00
31	---	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	---	0.35	1.86	1.81	0.68	1.70
MAX	---	---	---	---	---	---	---	0.18	1.24	1.28	0.26	0.93

e Estimated.

07126415 RED ROCK CANYON CREEK AT MOUTH NEAR THATCHER, CO

LOCATION.--Lat 37°30'55", long 103°43'30", Las Animas County, Hydrologic Unit 11020010, on left bank 200 ft downstream from Welsh Canyon Creek, 0.3 mi upstream from mouth, and 21 mi east of Thatcher.

DRAINAGE AREA.--48.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1983 to September 1990, October 1990 to April 2000 (annual maximum only), April 2000 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gages. Elevation of gage is 4,510 ft above sea level, from topographic map.

REMARKS.--Records fair. Natural flow of stream affected by erosion-control and livestock-watering reservoirs.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,430 ft³/s, June 13, 2002, from slope-area measurement of peak flow, gage height, 11.46 ft, from floodmarks; no flow on most days.

EXTREMES FOR CURRENT YEAR (seasonal only).---Maximum discharge, 3,430 ft³/s, June 13, 2002, from slope-area measurement of peak flow, gage height, 11.46 ft, from floodmarks; no flow on most days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
2	0.00	---	---	---	---	---	---	0.00	0.00	47	0.00	0.00
3	0.00	---	---	---	---	---	---	0.00	0.00	2.6	0.00	0.00
4	0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
5	0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
6	0.00	---	---	---	---	---	e0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	41
10	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	1.4
11	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	---	---	---	---	---	0.00	0.00	95	0.00	0.00	0.00
14	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	---	---	---	---	---	0.00	0.00	0.00	13	0.45	0.00
23	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
26	e0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
27	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
28	---	---	---	---	---	---	0.00	0.00	0.00	0.00	1.6	0.00
29	---	---	---	---	---	---	0.00	0.00	0.00	0.00	7.3	0.00
30	---	---	---	---	---	---	0.00	0.00	0.00	0.00	1.5	0.00
31	---	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	---	0.00	95.00	62.60	10.85	42.40
MEAN	---	---	---	---	---	---	---	0.000	3.167	2.019	0.350	1.413
MAX	---	---	---	---	---	---	---	0.00	95	47	7.3	41
MIN	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
AC-FT	---	---	---	---	---	---	---	0.00	188	124	22	84

e Estimated.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1983 to September 1990, June 2000 to current year (seasonal records only).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1983 to September 1990.

WATER TEMPERATURE: May 1983 to September 1990.

SUSPENDED SEDIMENT: June 2000 to current year (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

REMARKS.--Daily suspended-sediment records are fair. Daily mean suspended-sediment concentrations published for days of partial flow might not reflect the mean concentrations during the flow events, including July 2, 22, Aug. 28 and Sept. 9.

EXTREMES FOR PERIOD OF RECORD--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 886 mg/L, July 2, 2002; minimum daily mean, 128 mg/L, July 22, 2002; no flow on most days.

SUSPENDED SEDIMENT DISCHARGE (seasonal only): Maximum daily, 3,100 tons (estimated), June 13, 2002; minimum daily, 0.11 ton (estimated), Aug. 22, 2002; no flow on most days.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 886 mg/L, July 2; minimum daily mean, 128 mg/L, July 22; no flow on most days.

SUSPENDED SEDIMENT DISCHARGE (seasonal only): Maximum daily, 3,100 tons (estimated), June 13; minimum daily, 0.11 ton (estimated), Aug. 22; no flow on most days.

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
JUL						
02...	2200	186	169	--	3130	1570
02...	2230	97	200	14.5	2330	610
02...	2345	33	328	--	1340	119
03...	0045	18	376	--	1070	52.0
03...	0600	2.2	419	15.5	564	3.4
03...	1050	.62	442	21.0	377	.63

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN	MEAN	SEDIMENT DISCHARGE (TONS/DAY)	MEAN	MEAN	SEDIMENT DISCHARGE (TONS/DAY)	MEAN	MEAN	SEDIMENT DISCHARGE (TONS/DAY)
	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)		DISCHARGE (CFS)	CONCEN- TRATION (MG/L)		DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	
OCTOBER									
1	0.00	---	---	---	---	---	---	---	---
2	0.00	---	---	---	---	---	---	---	---
3	0.00	---	---	---	---	---	---	---	---
4	0.00	---	---	---	---	---	---	---	---
5	0.00	---	---	---	---	---	---	---	---
6	0.00	---	---	---	---	---	---	---	---
7	0.00	---	---	---	---	---	---	---	---
8	0.00	---	---	---	---	---	---	---	---
9	0.00	---	---	---	---	---	---	---	---
10	0.00	---	---	---	---	---	---	---	---
11	0.00	---	---	---	---	---	---	---	---
12	0.00	---	---	---	---	---	---	---	---
13	0.00	---	---	---	---	---	---	---	---
14	0.00	---	---	---	---	---	---	---	---
15	0.00	---	---	---	---	---	---	---	---
16	0.00	---	---	---	---	---	---	---	---
17	0.00	---	---	---	---	---	---	---	---
18	0.00	---	---	---	---	---	---	---	---
19	0.00	---	---	---	---	---	---	---	---
20	0.00	---	---	---	---	---	---	---	---
21	0.00	---	---	---	---	---	---	---	---
22	0.00	---	---	---	---	---	---	---	---
23	0.00	---	---	---	---	---	---	---	---
24	0.00	---	---	---	---	---	---	---	---
25	0.00	---	---	---	---	---	---	---	---
26	e0.00	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---

e Estimated.

07126415 RED ROCK CANYON CREEK AT MOUTH NEAR THATCHER, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	JANUARY			FEBRUARY			MARCH		
1	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	APRIL			MAY			JUNE		
1	---	---	---	0.00	---	---	0.00	---	---
2	---	---	---	0.00	---	---	0.00	---	---
3	---	---	---	0.00	---	---	0.00	---	---
4	---	---	---	0.00	---	---	0.00	---	---
5	---	---	---	0.00	---	---	0.00	---	---
6	e0.00	---	---	0.00	---	---	0.00	---	---
7	0.00	---	---	0.00	---	---	0.00	---	---
8	0.00	---	---	0.00	---	---	0.00	---	---
9	0.00	---	---	0.00	---	---	0.00	---	---
10	0.00	---	---	0.00	---	---	0.00	---	---
11	0.00	---	---	0.00	---	---	0.00	---	---
12	0.00	---	---	0.00	---	---	0.00	---	---
13	0.00	---	---	0.00	---	---	95	---	e3100
14	0.00	---	---	0.00	---	---	0.00	---	---
15	0.00	---	---	0.00	---	---	0.00	---	---
16	0.00	---	---	0.00	---	---	0.00	---	---
17	0.00	---	---	0.00	---	---	0.00	---	---
18	0.00	---	---	0.00	---	---	0.00	---	---
19	0.00	---	---	0.00	---	---	0.00	---	---
20	0.00	---	---	0.00	---	---	0.00	---	---
21	0.00	---	---	0.00	---	---	0.00	---	---
22	0.00	---	---	0.00	---	---	0.00	---	---
23	0.00	---	---	0.00	---	---	0.00	---	---
24	0.00	---	---	0.00	---	---	0.00	---	---
25	0.00	---	---	0.00	---	---	0.00	---	---
26	0.00	---	---	0.00	---	---	0.00	---	---
27	0.00	---	---	0.00	---	---	0.00	---	---
28	0.00	---	---	0.00	---	---	0.00	---	---
29	0.00	---	---	0.00	---	---	0.00	---	---
30	0.00	---	---	0.00	---	---	0.00	---	---
31	---	---	---	0.00	---	---	---	---	---
TOTAL	---	---	---	0.00	---	---	95.00	---	---

e Estimated.

ARKANSAS RIVER BASIN

07126415 RED ROCK CANYON CREEK AT MOUTH NEAR THATCHER, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT
	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)
	JULY			AUGUST			SEPTEMBER		
1	0.00	---	---	0.00	---	---	0.00	---	---
2	47	886	1320	0.00	---	---	0.00	---	---
3	2.6	404	6.0	0.00	---	---	0.00	---	---
4	0.00	---	---	0.00	---	---	0.00	---	---
5	0.00	---	---	0.00	---	---	0.00	---	---
6	0.00	---	---	0.00	---	---	0.00	---	---
7	0.00	---	---	0.00	---	---	0.00	---	---
8	0.00	---	---	0.00	---	---	0.00	---	---
9	0.00	---	---	0.00	---	---	41	454	395
10	0.00	---	---	0.00	---	---	1.4	---	e0.85
11	0.00	---	---	0.00	---	---	0.00	---	---
12	0.00	---	---	0.00	---	---	0.00	---	---
13	0.00	---	---	0.00	---	---	0.00	---	---
14	0.00	---	---	0.00	---	---	0.00	---	---
15	0.00	---	---	0.00	---	---	0.00	---	---
16	0.00	---	---	0.00	---	---	0.00	---	---
17	0.00	---	---	0.00	---	---	0.00	---	---
18	0.00	---	---	0.00	---	---	0.00	---	---
19	0.00	---	---	0.00	---	---	0.00	---	---
20	0.00	---	---	0.00	---	---	0.00	---	---
21	0.00	---	---	0.00	---	---	0.00	---	---
22	13	128	15.0	0.45	---	e0.11	0.00	---	---
23	0.00	---	---	0.00	---	---	0.00	---	---
24	0.00	---	---	0.00	---	---	0.00	---	---
25	0.00	---	---	0.00	---	---	0.00	---	---
26	0.00	---	---	0.00	---	---	0.00	---	---
27	0.00	---	---	0.00	---	---	0.00	---	---
28	0.00	---	---	1.6	305	e1.2	0.00	---	---
29	0.00	---	---	7.3	---	68.0	0.00	---	---
30	0.00	---	---	1.5	---	e0.85	0.00	---	---
31	0.00	---	---	0.00	---	---	---	---	---
TOTAL	62.60	---	---	10.85	---	---	42.40	---	---

e Estimated.

07126415 RED ROCK CANYON CREEK AT MOUTH NEAR THATCHER, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 2000 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published during period of operation are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 2.20 inches, Sept. 9, 2002.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 2.20 inches, Sept. 9.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
2	0.00	---	---	---	---	---	---	0.02	0.00	1.02	0.17	0.00
3	0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.02
4	0.00	---	---	---	---	---	---	0.00	0.31	0.00	0.00	0.00
5	0.04	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
6	0.00	---	---	---	---	---	e0.00	0.00	0.00	0.06	0.00	0.00
7	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	---	---	---	---	---	0.00	0.13	0.00	0.00	0.00	0.00
9	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	2.20
10	0.00	---	---	---	---	---	0.00	0.00	0.00	0.22	0.00	0.35
11	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	0.05	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	---	---	---	---	---	0.00	0.00	2.09	0.00	0.00	0.17
14	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.16
19	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	---	---	---	---	---	0.00	0.04	0.01	0.00	0.00	0.00
21	0.00	---	---	---	---	---	0.00	0.01	0.00	0.00	0.01	0.00
22	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.33	0.00
23	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.17	0.00
24	0.00	---	---	---	---	---	0.00	0.15	0.00	0.00	0.00	0.00
25	0.00	---	---	---	---	---	0.00	0.00	0.09	0.01	0.00	0.00
26	e0.00	---	---	---	---	---	0.04	0.00	0.00	0.00	0.00	0.00
27	---	---	---	---	---	---	0.01	0.00	0.00	0.00	0.00	0.00
28	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.26	0.00
29	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.29	0.03
30	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.01	0.00
31	---	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	---	0.35	2.50	1.31	1.24	2.93
MAX	---	---	---	---	---	---	---	0.15	2.09	1.02	0.33	2.20

e Estimated.

07126480 BENT CANYON CREEK AT MOUTH NEAR TIMPAS, CO

LOCATION.--Lat 37°35'21", long 103°38'52", in SE¹/₄SE¹/₄ sec.23, T.28 S., R.65 W., Las Animas County, Hydrologic Unit 11020010, on Comanche National Grassland (revised), on left bank 0.5 mi upstream from mouth, 0.6 mi southwest of Rourke Ranch house, 0.9 mi upstream from Iron Canyon, and 17 mi southeast of Timpas.

DRAINAGE AREA.--56.2 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1983 to September 1990, October 1990 to May 2000 (annual maximum only), June 2000 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gages. Elevation of gage is 4,402 ft above sea level, from topographic map.

REMARKS.--Records poor. Natural flow of stream affected by erosion-control and livestock-watering reservoirs.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,640 ft³/s, Aug. 21, 1984, from slope-area measurement of peak flow, gage height, 12.56 feet, from floodmark; no flow on most days.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 644 ft³/s, June 13, from rating curve extended above 0.50 ft³/s on the basis of step-backwater analysis of flow and slope-area measurements of peak flow at gage heights 4.67 ft, 8.70 ft, 8.93 ft, 11.61 ft, and 12.56 ft, gage height, 8.93 ft, from floodmarks; no flow on most days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
2	0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
3	0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
4	0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
5	0.00	---	---	---	---	---	e0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.84
11	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	---	---	---	---	---	0.00	0.00	26	0.00	0.00	0.00
14	0.00	---	---	---	---	---	0.00	0.00	e0.08	0.00	0.00	0.00
15	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	1.4	0.00
24	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
25	e0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
26	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
27	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
28	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
29	---	---	---	---	---	---	0.00	0.00	0.00	0.00	3.0	0.00
30	---	---	---	---	---	---	0.00	0.00	0.00	0.00	2.6	0.00
31	---	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	---	0.00	26.08	0.00	7.00	0.84
MEAN	---	---	---	---	---	---	---	0.000	0.869	0.000	0.226	0.028
MAX	---	---	---	---	---	---	---	0.00	26	0.00	3.0	0.84
MIN	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
AC-FT	---	---	---	---	---	---	---	0.00	52	0.00	14	1.7

e Estimated.

07126480 BENT CANYON CREEK AT MOUTH NEAR TIMPAS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1983 to September 1990, June 2000 to current year (seasonal records only).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1983 to September 1990.

WATER TEMPERATURE: July 1983 to September 1990.

SUSPENDED SEDIMENT: May 1983 to September 1990, June 2000 to current year (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

REMARKS.--Daily suspended-sediment records are poor. Daily mean sediment concentrations published for days of partial flow might not reflect mean concentrations during the flow event, including June 13 and Aug. 23.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATION: Maximum daily mean, 48,700 mg/L, July 15, 1984; minimum daily mean, 78 mg/L, July 2, 1986; no flow on most days.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 21,100 tons (estimated), Aug. 22, 1984; minimum daily, 0.02 ton (estimated), July 14, 1989, Aug. 16, 1990; no flow on most days.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only):: Maximum daily mean, 4,540 mg/L, June 13; minimum daily mean, 622 mg/L, Aug. 23; no flow on most days.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 880 tons, June 13; minimum daily, 0.12 ton (estimated), June 14; no flow on most days.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN	MEAN	SEDIMENT DISCHARGE (TONS/DAY)	MEAN	MEAN	SEDIMENT DISCHARGE (TONS/DAY)	MEAN	MEAN	SEDIMENT DISCHARGE (TONS/DAY)
	DISCHARGE (CFS)	CONCENTRATION (MG/L)		DISCHARGE (CFS)	CONCENTRATION (MG/L)		DISCHARGE (CFS)	CONCENTRATION (MG/L)	
OCTOBER			NOVEMBER			DECEMBER			
1	0.00	---	---	---	---	---	---	---	---
2	0.00	---	---	---	---	---	---	---	---
3	0.00	---	---	---	---	---	---	---	---
4	0.00	---	---	---	---	---	---	---	---
5	0.00	---	---	---	---	---	---	---	---
6	0.00	---	---	---	---	---	---	---	---
7	0.00	---	---	---	---	---	---	---	---
8	0.00	---	---	---	---	---	---	---	---
9	0.00	---	---	---	---	---	---	---	---
10	0.00	---	---	---	---	---	---	---	---
11	0.00	---	---	---	---	---	---	---	---
12	0.00	---	---	---	---	---	---	---	---
13	0.00	---	---	---	---	---	---	---	---
14	0.00	---	---	---	---	---	---	---	---
15	0.00	---	---	---	---	---	---	---	---
16	0.00	---	---	---	---	---	---	---	---
17	0.00	---	---	---	---	---	---	---	---
18	0.00	---	---	---	---	---	---	---	---
19	0.00	---	---	---	---	---	---	---	---
20	0.00	---	---	---	---	---	---	---	---
21	0.00	---	---	---	---	---	---	---	---
22	0.00	---	---	---	---	---	---	---	---
23	0.00	---	---	---	---	---	---	---	---
24	0.00	---	---	---	---	---	---	---	---
25	e0.00	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---

e Estimated.

ARKANSAS RIVER BASIN

07126480 BENT CANYON CREEK AT MOUTH NEAR TIMPAS, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	JANUARY			FEBRUARY			MARCH		
1	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	APRIL			MAY			JUNE		
1	---	---	---	0.00	---	---	0.00	---	---
2	---	---	---	0.00	---	---	0.00	---	---
3	---	---	---	0.00	---	---	0.00	---	---
4	---	---	---	0.00	---	---	0.00	---	---
5	e0.00	---	---	0.00	---	---	0.00	---	---
6	0.00	---	---	0.00	---	---	0.00	---	---
7	0.00	---	---	0.00	---	---	0.00	---	---
8	0.00	---	---	0.00	---	---	0.00	---	---
9	0.00	---	---	0.00	---	---	0.00	---	---
10	0.00	---	---	0.00	---	---	0.00	---	---
11	0.00	---	---	0.00	---	---	0.00	---	---
12	0.00	---	---	0.00	---	---	0.00	---	---
13	0.00	---	---	0.00	---	---	0.00	---	---
14	0.00	---	---	0.00	---	---	26 e0.08	4540	880
15	0.00	---	---	0.00	---	---	0.00	---	e0.12
16	0.00	---	---	0.00	---	---	0.00	---	---
17	0.00	---	---	0.00	---	---	0.00	---	---
18	0.00	---	---	0.00	---	---	0.00	---	---
19	0.00	---	---	0.00	---	---	0.00	---	---
20	0.00	---	---	0.00	---	---	0.00	---	---
21	0.00	---	---	0.00	---	---	0.00	---	---
22	0.00	---	---	0.00	---	---	0.00	---	---
23	0.00	---	---	0.00	---	---	0.00	---	---
24	0.00	---	---	0.00	---	---	0.00	---	---
25	0.00	---	---	0.00	---	---	0.00	---	---
26	0.00	---	---	0.00	---	---	0.00	---	---
27	0.00	---	---	0.00	---	---	0.00	---	---
28	0.00	---	---	0.00	---	---	0.00	---	---
29	0.00	---	---	0.00	---	---	0.00	---	---
30	0.00	---	---	0.00	---	---	0.00	---	---
31	---	---	---	0.00	---	---	---	---	---
TOTAL	---	---	---	0.00	---	---	26.08	---	---

e Estimated.

07126480 BENT CANYON CREEK AT MOUTH NEAR TIMPAS, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT
	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)
	JULY			AUGUST			SEPTEMBER		
1	0.00	---	---	0.00	---	---	0.00	---	---
2	0.00	---	---	0.00	---	---	0.00	---	---
3	0.00	---	---	0.00	---	---	0.00	---	---
4	0.00	---	---	0.00	---	---	0.00	---	---
5	0.00	---	---	0.00	---	---	0.00	---	---
6	0.00	---	---	0.00	---	---	0.00	---	---
7	0.00	---	---	0.00	---	---	0.00	---	---
8	0.00	---	---	0.00	---	---	0.00	---	---
9	0.00	---	---	0.00	---	---	0.00	---	---
10	0.00	---	---	0.00	---	---	0.84	---	e4.7
11	0.00	---	---	0.00	---	---	0.00	---	---
12	0.00	---	---	0.00	---	---	0.00	---	---
13	0.00	---	---	0.00	---	---	0.00	---	---
14	0.00	---	---	0.00	---	---	0.00	---	---
15	0.00	---	---	0.00	---	---	0.00	---	---
16	0.00	---	---	0.00	---	---	0.00	---	---
17	0.00	---	---	0.00	---	---	0.00	---	---
18	0.00	---	---	0.00	---	---	0.00	---	---
19	0.00	---	---	0.00	---	---	0.00	---	---
20	0.00	---	---	0.00	---	---	0.00	---	---
21	0.00	---	---	0.00	---	---	0.00	---	---
22	0.00	---	---	0.00	---	---	0.00	---	---
23	0.00	---	---	1.4	622	6.9	0.00	---	---
24	0.00	---	---	0.00	---	---	0.00	---	---
25	0.00	---	---	0.00	---	---	0.00	---	---
26	0.00	---	---	0.00	---	---	0.00	---	---
27	0.00	---	---	0.00	---	---	0.00	---	---
28	0.00	---	---	0.00	---	---	0.00	---	---
29	0.00	---	---	3.0	---	e33.0	0.00	---	---
30	0.00	---	---	2.6	---	e30.0	0.00	---	---
31	0.00	---	---	0.00	---	---	---	---	---
TOTAL	0.00	---	---	7.00	---	---	0.84	---	---

e Estimated.

07126480 BENT CANYON CREEK AT MOUTH NEAR TIMPAS, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--June 2000 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good except for Aug. 1 to Sept. 30, which are poor. Daily data that are not published during period of operation are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 2.28 inches, July 11, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.49 inches, Sept. 9.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	---	0.01	0.00	0.00	0.00	0.00
2	0.00	---	---	---	---	---	---	0.00	0.00	0.01	0.07	0.00
3	0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.02
4	0.00	---	---	---	---	---	---	0.00	0.40	0.00	0.31	0.01
5	0.02	---	---	---	---	---	e0.00	0.00	0.01	0.00	0.00	0.00
6	0.00	---	---	---	---	---	0.00	0.00	0.00	0.03	0.00	0.00
7	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	---	---	---	---	---	0.02	0.06	0.00	0.00	0.00	0.00
9	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	1.49
10	0.00	---	---	---	---	---	0.00	0.00	0.00	0.26	0.00	0.22
11	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	---	---	---	---	---	0.00	0.00	0.39	0.00	0.00	0.19
14	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.01
19	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	---	---	---	---	---	0.00	0.01	0.01	0.00	0.00	0.00
21	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.21	0.00
23	0.00	---	---	---	---	---	0.00	0.00	0.00	0.40	0.00	0.00
24	0.00	---	---	---	---	---	0.00	0.30	0.00	0.00	0.00	0.00
25	e0.00	---	---	---	---	---	0.00	0.00	0.40	0.00	0.00	0.00
26	---	---	---	---	---	---	0.12	0.00	0.00	0.00	0.00	0.00
27	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.0	0.00
28	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.03	0.00
29	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.47	0.00
30	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
31	---	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	---	0.38	1.21	0.70	1.09	1.94
MAX	---	---	---	---	---	---	---	0.30	0.40	0.40	0.47	1.49

e Estimated.

07126485 PURGATOIRE RIVER AT ROCK CROSSING NEAR TIMPAS, CO

LOCATION.--Lat 37°37'06", long 103°35'35" in NE¼SE¼ sec. 10, T.28 S., R.55 W., Las Animas County, Hydrologic Unit 11020010, on right bank at Rock Crossing, 2.1 mi upstream from Minnie Canyon, 2.4 mi downstream from Beaty Canyon, and 17 mi southeast of Timpas.

DRAINAGE AREA.--2,635 mi², of which 11.8 mi² is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1983 to current year.

REVISED RECORD.--WDR CO-87-1: 1984-86 (M). WDR CO-01-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gages. Elevation of gage is 4,350 ft above sea level, from topographic map. June 1, 1983 to July 17, 1985, at site 500 ft downstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants. Peak flows are regulated to some extent by Trinidad Lake (station 07124400) 92 mi upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	18	22	e15	e16	16	13	4.3	0.00	1.9	0.45	6.7
2	6.9	18	e23	e14	e17	17	11	4.0	0.00	0.97	0.26	2.2
3	6.2	19	e23	e15	e17	19	10	3.6	0.00	212	0.09	1.1
4	5.6	19	e23	e15	e17	18	10	3.1	0.00	17	0.00	0.72
5	5.7	20	e23	e16	e16	17	11	2.7	0.00	3.5	0.00	0.50
6	6.1	22	23	e16	e16	20	11	2.4	0.00	1.4	0.00	0.36
7	7.6	23	23	e17	e17	22	10	2.2	0.00	0.99	0.00	0.23
8	12	23	23	e17	e17	22	9.8	2.2	0.00	0.49	0.00	0.11
9	20	23	22	e17	e17	21	10	2.1	0.00	0.30	0.00	184
10	19	23	22	e16	17	21	10	1.8	0.00	0.12	0.00	1220
11	19	23	20	e15	e19	20	11	1.5	0.00	0.14	0.00	326
12	19	23	e20	e15	e18	19	11	1.2	0.00	0.00	0.00	90
13	19	23	e19	e15	e19	19	11	1.1	809	0.00	0.00	198
14	19	23	e19	e15	e19	17	9.2	0.96	47	0.00	0.00	416
15	20	23	e18	e15	e20	15	9.1	0.90	8.9	0.00	0.00	145
16	22	24	e18	e15	e21	15	9.2	0.83	3.5	0.00	0.00	49
17	21	24	e18	e15	21	14	8.5	0.74	1.7	37	0.00	25
18	20	24	e18	e16	23	14	7.7	0.72	0.88	14	0.00	16
19	19	24	e18	e16	24	13	7.6	0.67	0.52	4.8	0.00	163
20	19	22	e17	e16	24	12	7.5	0.61	0.37	2.0	0.00	449
21	19	21	e16	e16	24	12	6.9	0.55	45	0.86	0.00	110
22	18	21	e16	e17	24	12	6.2	0.48	146	0.48	0.00	138
23	18	23	e16	e16	24	12	5.5	0.40	41	181	0.00	82
24	18	23	e15	e15	23	11	4.8	0.45	18	69	0.00	37
25	17	22	e16	e16	23	11	4.3	0.48	35	23	0.00	23
26	17	22	e17	e16	22	13	4.3	0.51	16	15	0.00	16
27	17	24	e16	e16	21	13	4.2	0.43	22	12	0.00	11
28	18	e23	e17	e16	19	13	3.7	0.35	12	5.5	0.00	8.7
29	18	e23	e16	e16	---	12	4.3	0.24	6.2	2.9	1140	6.7
30	19	23	e15	e16	---	13	5.1	0.13	3.5	1.5	126	5.2
31	18	---	e15	e15	---	14	---	0.02	---	0.81	33	---
TOTAL	490.6	666	587	486	555	487	246.9	41.67	1216.57	608.66	1299.80	3730.52
MEAN	15.83	22.20	18.94	15.68	19.82	15.71	8.230	1.344	40.55	19.63	41.93	124.4
MAX	22	24	23	17	24	22	13	4.3	809	212	1140	1220
MIN	5.6	18	15	14	16	11	3.7	0.02	0.00	0.00	0.00	0.11
AC-FT	973	1320	1160	964	1100	966	490	83	2410	1210	2580	7400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2002, BY WATER YEAR (WY)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	41.70	39.87	33.65	31.74	34.26	44.54	85.85	126.4	98.56	74.81	117.7	48.34								
MAX	89.1	68.3	43.4	41.4	56.0	139	330	585	836	186	468	124								
(WY)	1999	1999	1998	1984	1988	1998	1993	1987	1983	1992	1999	2002								
MIN	13.0	20.5	15.6	15.7	19.7	15.7	8.32	1.34	7.23	11.2	24.4	12.5								
(WY)	1990	1990	1991	2002	2002	2002	2002	2002	2001	1989	2001	1990								

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1983 - 2002	
ANNUAL TOTAL	10336.35		10415.72			
ANNUAL MEAN	28.32		28.54		61.50	
HIGHEST ANNUAL MEAN					123	
LOWEST ANNUAL MEAN					28.5	
HIGHEST DAILY MEAN	392		1220		4190	
LOWEST DAILY MEAN	0.21		0.00		a0.00	
ANNUAL SEVEN-DAY MINIMUM	0.65		0.00		0.00	
MAXIMUM PEAK FLOW			4150		b11400	
MAXIMUM PEAK STAGE			13.78		c17.90	
ANNUAL RUNOFF (AC-FT)	20500		20660		44550	
10 PERCENT EXCEEDS	41		24		108	
50 PERCENT EXCEEDS	21		15		34	
90 PERCENT EXCEEDS	6.0		0.00		12	

e Estimated.
a Also occurred Jul 1-9, 1990, and many days in water year 2002.
b From slope-area measurement of peak flow.
c From floodmarks.

07126485 PURGATOIRE RIVER AT ROCK CROSSING NEAR TIMPAS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to September 1992, June 1997 to current year (seasonal peaks only).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1983 to September 1992.

WATER TEMPERATURE: July 1983 to September 1992.

SUSPENDED SEDIMENT: August 1983 to September 1992, June 1997 to current year (seasonal peaks only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

REMARKS.--Daily suspended-sediment records are poor. Daily suspended-sediment records are published for days when instantaneous discharge exceeds 100 ft³/s. Daily mean suspended-sediment concentrations published for days of partial flow might not reflect mean concentrations during the flow event, including June 13 and Aug. 29. Daily maximum and minimum specific conductance and daily mean water-temperature data for July 1983 to September 1992 are available in files of the district office.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 54,900 mg/L, Aug. 16, 1986; minimum daily mean, 5 mg/L, Mar. 22, 1988, and Feb. 10, 1989.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily (occurred during period of seasonal record), 287,000 tons (estimated), May 2, 1999; minimum daily, 0.0 ton (estimated), several days during 1989 and 1990.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS (seasonal peaks only): Maximum daily mean, 7,730 mg/L, Aug. 29; minimum daily mean, 181 mg/L, June 21.

SUSPENDED-SEDIMENT DISCHARGE (seasonal peaks only): Maximum daily, 44,400 tons (estimated), Sept. 10; minimum daily, 160 tons (estimated), June 21.

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)
OCT						
25...	1245	18	2900	11.0	--	--
DEC						
19...	1115	16	3270	2.0	--	--
MAR						
01...	1615	16	3130	1.0	--	--
APR						
11...	1335	12	3510	18.5	--	--
MAY						
15...	1145	.92	4190	22.0	43	.11
JUN						
20...	1030	.40	1240	20.5	7.0	.01
28...	0930	12	1530	25.0	51	1.7
AUG						
01...	1440	.39	2810	27.5	--	--

07126485 PURGATOIRE RIVER AT ROCK CROSSING NEAR TIMPAS, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	7.5	---	---	18	---	---	22	---	---
2	6.9	---	---	18	---	---	e23	---	---
3	6.2	---	---	19	---	---	e23	---	---
4	5.6	---	---	19	---	---	e23	---	---
5	5.7	---	---	20	---	---	e23	---	---
6	6.1	---	---	22	---	---	23	---	---
7	7.6	---	---	23	---	---	23	---	---
8	12	---	---	23	---	---	23	---	---
9	20	---	---	23	---	---	22	---	---
10	19	---	---	23	---	---	22	---	---
11	19	---	---	23	---	---	20	---	---
12	19	---	---	23	---	---	e20	---	---
13	19	---	---	23	---	---	e19	---	---
14	19	---	---	23	---	---	e19	---	---
15	20	---	---	23	---	---	e18	---	---
16	22	---	---	24	---	---	e18	---	---
17	21	---	---	24	---	---	e18	---	---
18	20	---	---	24	---	---	e18	---	---
19	19	---	---	24	---	---	e18	---	---
20	19	---	---	22	---	---	e17	---	---
21	19	---	---	21	---	---	e16	---	---
22	18	---	---	21	---	---	e16	---	---
23	18	---	---	23	---	---	e16	---	---
24	18	---	---	23	---	---	e15	---	---
25	17	---	---	22	---	---	e16	---	---
26	17	---	---	22	---	---	e17	---	---
27	17	---	---	24	---	---	e16	---	---
28	18	---	---	e23	---	---	e17	---	---
29	18	---	---	e23	---	---	e16	---	---
30	19	---	---	23	---	---	e15	---	---
31	18	---	---	---	---	---	e15	---	---
TOTAL	490.6	---	---	666	---	---	587	---	---

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	JANUARY			FEBRUARY			MARCH		
1	e15	---	---	e16	---	---	16	---	---
2	e14	---	---	e17	---	---	17	---	---
3	e15	---	---	e17	---	---	19	---	---
4	e15	---	---	e17	---	---	18	---	---
5	e16	---	---	e16	---	---	17	---	---
6	e16	---	---	e16	---	---	20	---	---
7	e17	---	---	e17	---	---	22	---	---
8	e17	---	---	e17	---	---	22	---	---
9	e17	---	---	e17	---	---	21	---	---
10	e16	---	---	17	---	---	21	---	---
11	e15	---	---	e19	---	---	20	---	---
12	e15	---	---	e18	---	---	19	---	---
13	e15	---	---	e19	---	---	19	---	---
14	e15	---	---	e19	---	---	17	---	---
15	e15	---	---	e20	---	---	15	---	---
16	e15	---	---	e21	---	---	15	---	---
17	e15	---	---	21	---	---	14	---	---
18	e16	---	---	23	---	---	14	---	---
19	e16	---	---	24	---	---	13	---	---
20	e16	---	---	24	---	---	12	---	---
21	e16	---	---	24	---	---	12	---	---
22	e17	---	---	24	---	---	12	---	---
23	e16	---	---	24	---	---	12	---	---
24	e15	---	---	23	---	---	11	---	---
25	e16	---	---	23	---	---	11	---	---
26	e16	---	---	22	---	---	13	---	---
27	e16	---	---	21	---	---	13	---	---
28	e16	---	---	19	---	---	13	---	---
29	e16	---	---	---	---	---	12	---	---
30	e16	---	---	---	---	---	13	---	---
31	e15	---	---	---	---	---	14	---	---
TOTAL	486	---	---	555	---	---	487	---	---

e Estimated.

ARKANSAS RIVER BASIN

07126485 PURGATOIRE RIVER AT ROCK CROSSING NEAR TIMPAS, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	13	---	---	4.3	---	---	0.00	---	---
2	11	---	---	4.0	---	---	0.00	---	---
3	10	---	---	3.6	---	---	0.00	---	---
4	10	---	---	3.1	---	---	0.00	---	---
5	11	---	---	2.7	---	---	0.00	---	---
6	11	---	---	2.4	---	---	0.00	---	---
7	10	---	---	2.2	---	---	0.00	---	---
8	9.8	---	---	2.2	---	---	0.00	---	---
9	10	---	---	2.1	---	---	0.00	---	---
10	10	---	---	1.8	---	---	0.00	---	---
11	11	---	---	1.5	---	---	0.00	---	---
12	11	---	---	1.2	---	---	0.00	---	---
13	11	---	---	1.1	---	---	809	4920	18800
14	9.2	---	---	0.96	---	---	47	1010	161
15	9.1	---	---	0.90	---	---	8.9	---	---
16	9.2	---	---	0.83	---	---	3.5	---	---
17	8.5	---	---	0.74	---	---	1.7	---	---
18	7.7	---	---	0.72	---	---	0.88	---	---
19	7.6	---	---	0.67	---	---	0.52	---	---
20	7.5	---	---	0.61	---	---	0.37	---	---
21	6.9	---	---	0.55	---	---	45	181	160
22	6.2	---	---	0.48	---	---	146	950	432
23	5.5	---	---	0.40	---	---	41	---	---
24	4.8	---	---	0.45	---	---	18	---	---
25	4.3	---	---	0.48	---	---	35	934	406
26	4.3	---	---	0.51	---	---	16	---	---
27	4.2	---	---	0.43	---	---	22	---	---
28	3.7	---	---	0.35	---	---	12	---	---
29	4.3	---	---	0.24	---	---	6.2	---	---
30	5.1	---	---	0.13	---	---	3.5	---	---
31	---	---	---	0.02	---	---	---	---	---
TOTAL	246.9	---	---	41.67	---	---	1216.57	---	---

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.9	---	---	0.45	---	---	6.7	---	---
2	0.97	---	---	0.26	---	---	2.2	---	---
3	212	2520	2550	0.09	---	---	1.1	---	---
4	17	---	---	0.00	---	---	0.72	---	---
5	3.5	---	---	0.00	---	---	0.50	---	---
6	1.4	---	---	0.00	---	---	0.36	---	---
7	0.99	---	---	0.00	---	---	0.23	---	---
8	0.49	---	---	0.00	---	---	0.11	---	---
9	0.30	---	---	0.00	---	---	184	1250	5130
10	0.12	---	---	0.00	---	---	1220	---	e44400
11	0.14	---	---	0.00	---	---	326	---	e5840
12	0.00	---	---	0.00	---	---	90	---	e808
13	0.00	---	---	0.00	---	---	198	---	e2710
14	0.00	---	---	0.00	---	---	416	---	e8500
15	0.00	---	---	0.00	---	---	145	---	e1680
16	0.00	---	---	0.00	---	---	49	---	---
17	37	---	---	0.00	---	---	25	---	---
18	14	---	---	0.00	---	---	16	---	---
19	4.8	---	---	0.00	---	---	163	---	e2010
20	2.0	---	---	0.00	---	---	449	---	e9560
21	0.86	---	---	0.00	---	---	110	---	e1100
22	0.48	---	---	0.00	---	---	138	---	e1560
23	181	3700	2880	0.00	---	---	82	---	e700
24	69	1220	246	0.00	---	---	37	---	---
25	23	---	---	0.00	---	---	23	---	---
26	15	---	---	0.00	---	---	16	---	---
27	12	---	---	0.00	---	---	11	---	---
28	5.5	---	---	0.00	---	---	8.7	---	---
29	2.9	---	---	1140	7730	41400	6.7	---	---
30	1.5	---	---	126	1890	674	5.2	---	---
31	0.81	---	---	33	---	---	---	---	---
TOTAL	608.66	---	---	1299.80	---	---	3730.52	---	---

e Estimated.

07126485 PURGATOIRE RIVER AT ROCK CROSSING NEAR TIMPAS, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 1999 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good except for Oct. 1-25, which are fair. Daily data that are not published during period of operation are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 2.11 inches, Oct. 4, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.22 inches, Sept. 9.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	---	0.01	0.01	0.00	0.00	0.00
2	0.00	---	---	---	---	---	---	0.02	0.00	0.06	0.06	0.00
3	0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.01	0.08
4	0.00	---	---	---	---	---	---	0.00	0.46	0.00	0.02	0.01
5	0.02	---	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00
6	0.00	---	---	---	---	---	---	0.00	0.00	0.03	0.00	0.00
7	0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
8	0.00	---	---	---	---	---	---	0.12	0.00	0.00	0.00	0.00
9	0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	1.22
10	0.00	---	---	---	---	---	---	0.00	0.00	0.65	0.00	0.41
11	0.00	---	---	---	---	---	e0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	---	---	---	---	---	0.00	0.00	0.08	0.00	0.00	0.15
14	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.04
15	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	---	---	---	---	---	0.00	0.01	0.02	0.00	0.00	0.00
21	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.94	0.00
23	0.00	---	---	---	---	---	0.00	0.00	0.00	0.12	0.00	0.00
24	0.00	---	---	---	---	---	0.00	0.51	0.00	0.00	0.00	0.00
25	e0.00	---	---	---	---	---	0.00	0.00	0.53	0.00	0.00	0.00
26	---	---	---	---	---	---	0.06	0.00	0.00	0.00	0.00	0.00
27	---	---	---	---	---	---	0.03	0.00	0.00	0.00	0.00	0.00
28	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.05	0.00
29	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.45	0.00
30	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
31	---	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	---	0.67	1.11	0.86	1.53	1.91
MAX	---	---	---	---	---	---	---	0.51	0.53	0.65	0.94	1.22

e Estimated.

07128500 PURGATOIRE RIVER NEAR LAS ANIMAS, CO

LOCATION.--Lat 38°02'02", long 103°12'00", in NE¹/₄SW¹/₄ sec.23, T.23 S., R.52 W., Bent County, Hydrologic Unit 11020010, on left bank at downstream side of bridge on State Highway 101 (revised), 2.3 mi southeast of courthouse in Las Animas, and 4.5 mi upstream from mouth. Prior to July 17, 2002, at site on right bank.

DRAINAGE AREA.--3,318 mi², of which 11.8 mi² is noncontributing.

PERIOD OF RECORD.--May to September 1889, July to October 1909 (gage heights and discharge measurements only), January 1922 to September 1931, July 1948 to current year. Monthly discharge only for some periods, published in WSP 1311. Published as Purgatoire Creek at Las Animas in 1889 and as Purgatory River near Las Animas in 1909. Statistical summary computed for 1978 to current year, subsequent to completion of Trinidad Reservoir. Daily record for water temperature and specific conductance available, December 1985 to September 1996.

REVISED RECORDS.--WSP 1241: 1927(M); WDR CO-01-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 3,878.04 ft above sea level. See WSP 1731 for history of changes prior to Oct. 1, 1955. Oct. 1, 1955 to July 11, 1966, at datum 6.00 ft higher. July 12 to Nov. 17, 1966, supplementary water-stage recorder at site 1.6 mi downstream at different datum. Nov. 18, 1966 to May 4, 1982, at datum 3.1 ft higher. May 5, 1982 to July 17, 2002, at site on right bank at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants. Flows regulated to some extent by Trinidad Lake (station 07124400) about 141 mi upstream since January 1975. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 1, 1904, is the greatest since at least 1860.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	18	25	23	25	23	8.9	2.8	1.3	2.0	e0.34	37
2	6.5	19	24	27	e25	18	6.5	3.8	1.2	1.3	0.35	14
3	5.2	19	22	21	27	19	4.5	3.2	1.3	0.97	0.41	5.4
4	5.1	20	23	22	25	22	4.0	2.8	1.6	28	0.69	2.9
5	5.2	20	23	21	27	24	3.7	2.7	1.7	28	0.95	1.5
6	4.9	20	19	22	27	21	4.8	2.5	1.5	11	0.48	1.1
7	4.6	18	23	25	e27	16	4.5	2.5	1.2	5.2	0.43	0.74
8	4.3	11	23	25	e25	14	4.8	2.5	1.1	2.5	0.51	0.65
9	5.8	8.3	22	30	27	15	5.3	2.5	0.99	1.4	0.44	0.88
10	6.2	7.2	21	31	19	12	8.2	2.4	1.1	0.91	0.43	219
11	6.3	10	19	28	26	18	8.8	2.3	1.1	0.87	0.38	786
12	3.8	15	22	29	26	19	8.7	2.1	1.1	0.66	0.34	218
13	5.7	14	18	28	23	16	9.0	2.0	1.2	0.64	0.34	120
14	16	16	19	27	24	13	10	2.2	338	0.67	0.34	344
15	16	20	24	26	27	18	10	2.0	71	0.51	0.33	277
16	16	13	24	24	25	50	8.1	2.0	23	0.50	0.33	131
17	19	9.3	24	21	26	35	7.4	2.0	10	0.45	0.32	66
18	24	12	26	20	25	33	7.5	1.9	5.5	0.37	0.32	38
19	24	15	23	22	24	16	6.3	1.7	2.9	0.37	0.33	25
20	20	15	26	23	23	11	6.9	1.8	1.5	0.36	0.33	174
21	19	19	21	26	25	11	9.8	1.7	1.1	0.38	0.33	250
22	19	18	20	34	25	12	7.5	1.6	0.96	0.35	0.33	105
23	19	16	22	32	26	11	5.0	1.6	2.0	0.49	0.34	91
24	18	22	24	21	25	8.4	e4.8	2.1	23	0.50	e0.32	84
25	18	22	22	22	23	11	e4.7	1.9	15	0.46	e0.32	42
26	18	20	21	31	18	11	e4.5	1.6	8.3	4.7	e0.32	27
27	19	21	20	27	21	9.4	e4.0	1.7	4.7	e6.0	e0.32	20
28	20	18	18	28	25	9.2	e3.5	1.7	7.6	e2.3	0.76	14
29	19	19	20	27	---	11	e3.3	2.1	2.9	e1.2	168	11
30	19	22	15	e26	---	8.0	e3.1	1.6	2.1	e0.52	290	8.1
31	18	---	16	e25	---	6.2	---	1.4	---	e0.33	59	---
TOTAL	412.2	496.8	669	794	691	521.2	188.1	66.7	535.95	103.91	528.43	3114.27
MEAN	13.30	16.56	21.58	25.61	24.68	16.81	6.270	2.152	17.86	3.352	17.05	103.8
MAX	24	22	26	34	27	50	10	3.8	338	28	290	786
MIN	3.8	7.2	15	20	18	6.2	3.1	1.4	0.96	0.33	0.32	0.65
AC-FT	818	985	1330	1570	1370	1030	373	132	1060	206	1050	6180

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2002, BY WATER YEAR (WY)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	37.74	38.28	30.42	32.50	32.63	42.82	80.77	132.7	99.61	72.10	127.3	49.46													
MAX	125	88.4	57.5	57.4	61.9	169	418	614	724	263	761	224													
(WY)	1999	1999	1998	1998	1998	1998	1983	1987	1983	1981	1981	1981													
MIN	1.58	1.90	2.38	4.72	5.65	5.26	3.53	2.16	8.76	3.36	3.76	3.14													
(WY)	1978	1979	1979	1979	1979	1978	1978	2002	1990	2002	1980	1978													

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1978 - 2002

ANNUAL TOTAL	10251.1	8121.56		
ANNUAL MEAN	28.09	22.25	a64.91	
HIGHEST ANNUAL MEAN			166	1983
LOWEST ANNUAL MEAN			22.2	2002
HIGHEST DAILY MEAN	1030	Jul 27	b3890	May 3 1999
LOWEST DAILY MEAN	1.5	Jun 26	c,d0.32	Aug 17 2002
ANNUAL SEVEN-DAY MINIMUM	2.1	Jun 22	d0.33	Aug 21 2002
MAXIMUM PEAK FLOW			f6680	Jul 5 1981
MAXIMUM PEAK STAGE			g10.09	Jul 5 1981
ANNUAL RUNOFF (AC-FT)	20330	16110	47020	
10 PERCENT EXCEEDS	45	27	120	
50 PERCENT EXCEEDS	20	12	30	
90 PERCENT EXCEEDS	3.9	0.51	4.4	

e Estimated.

a Average discharge for 37 years (water years 1923-31, 1949-76), 116 ft³/s; 84,040 acre-ft/yr, prior to completion of Trinidad Reservoir.

b Maximum daily discharge for period of record, 46,300 ft³/s, May 20, 1955.

c Also occurred Aug 18, 24-27 (estimated), 2002.

d No flow at times in 1924-25, 1927, 1949, and 1974.

f From rating curve extended above 4,460 ft³/s; maximum discharge for period of record, 70,000 ft³/s, May 20, 1955, from rating curve extended above 38,000 ft³/s, gage height, 15.00 ft, datum then in use.

g Maximum gage height for statistical period, 12.00 ft, May 3, 1999; maximum gage height for period of record, 15.94 ft, Jun 18, 1965, datum then in use.

07130000 JOHN MARTIN RESERVOIR AT CADDOA, CO

LOCATION.--Lat 38°04'05", long 102°56'13", in NE¹/₄NW¹/₄ sec.8, T.23 S., R.49 W., Bent County, Hydrologic Unit 11020009, in north parapet of dam on Arkansas River at Caddoa, 3.2 mi southeast of Hasty, and 58 mi upstream from Colorado-Kansas State Line.

DRAINAGE AREA.--18,915 mi², of which 785 mi² is probably noncontributing.

PERIOD OF RECORD.--December 1942 to current year. Month-end contents only prior to November 1943, published in WSP 1311. Water-quality data available, June to October 1988 (profile and chemical data at transects along length of reservoir).

GAGE.--Water-stage recorder with satellite telemetry for elevations above 3,784 ft (48 acre-feet) and nonrecording gage read once daily for those below. Datum of gage is 3,760.00 ft above sea level (levels by U.S. Army Corps of Engineers); gage readings have been reduced to elevations above sea level.

REMARKS.--Reservoir is formed by concrete and earthfill dam. Construction started fall of 1939; storage began while dam was under construction in Jan. 1943; record of contents began Dec. 31, 1942; dam completed October 1948. All figures represent total contents from area-capacity table effective Nov. 1, 1999, and based on a 1999 resurvey by the U.S. Army Corp of Engineers. Total capacity at top of dam, 793,400 acre-ft at elevation 3,880.00 ft. Maximum flood control storage at top of spillway gates, 603,500 acre-ft at elevation 3,870.00 ft. Maximum recreation and conservation storage, 344,000 acre-ft at elevation 3,851.87 ft. Capacity at spillway crest, 222,400 acre-ft at elevation 3,840.00 ft. Elevation of no contents, 3,780.00 ft. No dead storage. Reservoir is used for flood control, storage for irrigation, recreation, and in the administration of terms of the Arkansas River Compact between the states of Colorado and Kansas.

COOPERATION.--Capacity tables provided by U.S. Army Corps of Engineers. Records prior to 1979 were furnished by the U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 451,000 acre-ft, May 10, 1999, elevation, 3,860.57 ft; no contents at times many years.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 92,200 acre-ft, Apr. 9, elevation, 3,821.19 ft; minimum contents, 22,200 acre-ft, Sept. 30, elevation, 3,801.87 ft.

Capacity table (elevation, in feet, and contents, in acre-feet, effective Nov. 1, 1999)

3,785.0	235	3,820.0	86,400
3,790.0	2,410	3,830.0	144,000
3,795.0	8,300	3,840.0	222,000
3,800.0	17,800	3,850.0	323,000
3,810.0	46,200	3,860.0	448,000

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52700	50100	57800	69200	79100	86600	91700	72700	59600	38500	29900	24200
2	52200	50300	58200	69500	79300	86700	91700	71000	59500	37800	29800	24000
3	51500	50500	58600	69700	79600	86800	91500	69300	59100	36500	29700	23800
4	51200	50700	58900	70000	79900	87100	91600	e68200	59200	36300	29500	23800
5	50700	51000	59300	70500	80300	87400	91700	e66900	59000	36100	29400	23700
6	50400	51200	59700	71100	80600	87800	91800	65700	58500	35800	29200	23600
7	50500	51400	60100	71600	80800	88200	91900	64900	58200	35600	29000	23300
8	50500	51400	60400	72000	81200	88500	92000	64000	57800	35400	28900	23200
9	50400	51500	60800	72400	81600	88700	92000	63600	57500	35200	28600	23400
10	50300	51700	61100	72700	81700	88900	91900	63400	57200	35100	28600	23400
11	50300	51800	61500	73100	81900	89100	91500	63300	56800	34900	28600	23700
12	50100	51900	62000	73500	82200	89300	91000	63100	56600	34700	28400	23700
13	e50100	52100	62400	73800	82500	89500	90700	62900	56400	34700	28100	23700
14	e50100	52400	62700	74000	82800	89800	90300	62800	56500	34500	27900	23700
15	e50100	52500	63100	74400	83000	90000	89600	62600	56500	34300	27800	24300
16	e50200	52800	63700	74600	83300	90200	88100	62400	56200	34200	27600	24100
17	e50200	53000	64100	74900	83600	90400	86700	62400	55000	34100	27300	23600
18	e50300	53200	64500	75300	83800	90600	85400	62100	53200	33800	27100	23300
19	e50400	53400	64800	75400	84200	90700	84400	62100	51200	33700	27000	23200
20	50400	53700	65100	75700	84400	90700	83500	61800	50300	33500	26800	23200
21	50400	54000	65700	76000	84600	90800	82600	61700	49100	33300	26500	23500
22	50400	54300	66000	76400	85000	90800	81700	61600	48000	32900	26200	23700
23	50300	55100	66400	76700	85200	91000	80900	61100	47000	32500	26100	23600
24	e50300	55300	66700	76800	85400	91100	79700	61200	45800	32200	25900	23400
25	50200	55800	67000	77100	85800	91100	78500	61000	44800	31700	25600	23300
26	50100	56100	67300	77500	85900	91200	77600	60900	43900	31500	25300	23200
27	50000	56300	67700	77700	86100	91400	76700	60700	42900	31200	25200	23000
28	49900	56700	67900	78000	86400	91500	75800	60500	41700	30800	25200	22700
29	49600	57100	68300	78300	---	91600	74900	60300	40600	30600	25300	22400
30	49800	57400	68600	78700	---	91700	73800	60200	39500	30300	25000	22300
31	49800	---	68900	79000	---	91800	---	60100	---	30200	24500	---
MAX	52700	57400	68900	79000	86400	91800	92000	72700	59600	38500	29900	24300
MIN	49600	50100	57800	69200	79100	86600	73800	60100	39500	30200	24500	22300

e Estimated.

07130500 ARKANSAS RIVER BELOW JOHN MARTIN RESERVOIR, CO

LOCATION.--Lat 38°03'59", long 102°55'55", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.8, T.23 S., R.49 W., Bent County, Hydrologic Unit 11020009, on right bank 0.2 mi downstream from John Martin Dam, 2.6 mi upstream from Caddoa Creek, and 3.5 mi southeast of Hasty.

DRAINAGE AREA.--18,915 mi², of which 785 mi² is probably noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1938 to current year. Published as "at Caddoa" prior to October 1947. Statistical summary computed for 1949 to current year, subsequent to completion of John Martin Reservoir.

REVISED RECORDS.--WSP 1241: 1942(M). WSP 1341: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Datum of gage is 3,737.40 ft above sea level. Prior to Feb. 22, 1940, at site 3 mi upstream at datum 22.83 ft higher. Feb. 22, 1940 to Feb. 4, 1943, at site 700 ft upstream at datum 3.64 ft higher. Feb. 5, 1943 to Apr. 8, 1975, at site 1.5 mi downstream at datum approximately 27.5 ft lower.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by storage reservoirs, power developments, transbasin and transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants. Flow completely regulated by John Martin Reservoir (station 07130000) 0.2 mi upstream since Oct. 1948.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	338	49	1.8	1.6	1.2	1.3	9.7	628	105	510	56	212
2	335	12	1.8	1.6	1.2	1.4	14	837	104	498	41	81
3	335	6.3	1.9	1.6	1.2	1.3	13	855	129	493	37	50
4	333	6.9	2.0	1.6	1.2	1.4	16	768	151	142	38	24
5	288	4.2	2.0	1.7	1.2	1.4	16	680	150	101	38	27
6	137	3.6	2.0	1.6	1.4	1.5	15	569	151	98	38	38
7	54	5.7	2.0	1.7	1.4	1.4	14	479	151	98	38	46
8	53	6.2	2.0	1.7	1.4	1.3	12	444	151	86	38	46
9	63	4.8	2.0	1.7	1.1	1.4	12	128	151	74	38	46
10	70	4.0	2.0	1.7	1.3	1.4	118	108	133	73	38	46
11	70	3.8	2.0	1.5	1.4	1.3	222	97	120	73	38	193
12	72	3.2	2.1	1.4	1.4	1.4	236	96	120	43	52	513
13	71	2.7	2.1	1.3	1.5	1.4	247	90	121	18	63	285
14	71	5.8	2.1	1.4	1.4	1.3	246	75	141	16	63	104
15	58	9.9	2.0	1.4	1.4	1.4	440	69	172	24	63	105
16	45	8.8	2.0	1.4	1.3	1.3	690	69	171	29	65	266
17	44	8.4	1.8	1.4	1.4	1.4	766	69	518	28	65	375
18	44	7.8	1.8	1.4	1.4	1.4	705	69	911	50	66	200
19	69	7.2	1.8	1.4	1.4	1.4	571	69	842	67	66	62
20	96	7.6	1.8	1.3	1.4	1.4	490	65	632	67	81	48
21	96	7.9	1.8	1.3	1.3	1.3	488	82	528	66	94	48
22	119	7.6	2.0	1.4	1.4	1.4	511	96	529	117	93	48
23	154	7.5	1.8	1.3	1.4	1.4	542	111	528	172	96	143
24	163	6.7	1.8	1.2	1.4	1.4	563	111	527	171	97	178
25	163	6.1	1.8	1.2	1.3	1.4	570	100	518	147	97	127
26	163	3.9	1.8	1.2	1.3	1.4	553	101	513	124	96	96
27	163	1.8	1.8	1.2	1.4	1.4	538	101	517	120	93	119
28	163	1.8	1.8	1.2	1.4	5.1	537	100	518	118	118	143
29	110	1.8	1.6	1.2	---	2.2	536	100	518	97	236	142
30	85	1.8	1.6	1.2	---	2.1	538	93	517	75	400	87
31	96	---	1.6	1.2	---	2.1	---	97	---	73	396	---
TOTAL	4121	214.8	58.4	44.0	37.5	48.7	10228.7	7356	10337	3868	2838	3898
MEAN	132.9	7.160	1.884	1.419	1.339	1.571	341.0	237.3	344.6	124.8	91.55	129.9
MAX	338	49	2.1	1.7	1.5	5.1	766	855	911	510	400	513
MIN	44	1.8	1.6	1.2	1.1	1.3	9.7	65	104	16	37	24
AC-FT	8170	426	116	87	74	97	20290	14590	20500	7670	5630	7730

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2002, BY WATER YEAR (WY)

	MEAN	200.2	26.04	16.92	19.73	23.35	53.98	424.4	480.8	596.1	704.9	566.4	325.5
MAX	565	217	317	725	477	498	1174	2576	2665	2895	2127	1007	1007
(WY)	1949	1966	1998	1998	1966	1998	1987	1987	1987	1995	1965	1984	1984
MIN	11.4	0.85	0.64	0.62	0.75	1.06	2.43	34.2	52.0	86.1	22.6	6.69	6.69
(WY)	1975	1977	1977	1977	1977	1980	1973	1975	1954	1963	1960	1974	1974

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1949 - 2002

ANNUAL TOTAL		112070.7		43050.1									
ANNUAL MEAN		307.0		117.9						a287.9			
HIGHEST ANNUAL MEAN				745								1987	
LOWEST ANNUAL MEAN				82.5								1964	
HIGHEST DAILY MEAN		1380		911		Jun 27		Jun 18		3830		Aug 25	1965
LOWEST DAILY MEAN		1.6		1.1		Jan 1		Feb 9		b0.36		Dec 25	1979
ANNUAL SEVEN-DAY MINIMUM		1.6		1.2		Mar 7		Jan 24		0.36		Dec 25	1979
MAXIMUM PEAK FLOW				935				Jun 18		c4100		Aug 25	1965
MAXIMUM PEAK STAGE				3.38				Jun 18		d5.75		Aug 25	1965
ANNUAL RUNOFF (AC-FT)		222300		85390						208600			
10 PERCENT EXCEEDS		980		495						880			
50 PERCENT EXCEEDS		63		46						61			
90 PERCENT EXCEEDS		1.8		1.4						2.0			

a Average discharge for 5 years (water years 1939-43), 628 ft³/s; 455,000 acre-ft/yr, prior to start of storage in John Martin Reservoir.

b Also occurred Dec 26, 1979 to Jan 3, 1980; no flow on many days during 1945-47. Minimum daily discharge prior to start of storage in John Martin Reservoir, 5 ft³/s, Jul 16, 1939.

c Maximum discharge for period of record, 40,000 ft³/s, Apr 24, 1942, from rating curve extended above 12,000 ft³/s on basis of flow-over-dam and critical-depth measurement of peak flow, gage height, 10.46 ft, site and datum then in use.

d Maximum gage height for period of record, 10.62 ft, Jun 18, 1965 (backwater from Caddoa Creek), site and datum then in use.

07130500 ARKANSAS RIVER BELOW JOHN MARTIN RESERVOIR, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1942 to August 1943, October 1945 to July 1949, January 1951 to September 1981, December 1985 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1964 to September 1981 (observer once-daily measurements), December 1985 to current year.
 WATER TEMPERATURE: January 1951 to September 1981 (observer once-daily measurements), December 1985 to current year.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry.

REMARKS.--Daily specific-conductance records are poor. Daily water-temperature records are good. Daily data that are not published are either missing or of unacceptable quality. Reported values are representative of the stream during steady flows based on cross-section comparisons made during the year at flows between 53-153 ft³/s.

EXTREMES FOR PERIOD OF RECORD (1985 to current year).--

SPECIFIC CONDUCTANCE: Maximum, 3,540 microsiemens/cm, Feb. 26, 1986; minimum, 1,060 microsiemens/cm, on many days in 1995.
 WATER TEMPERATURE: Maximum, 28.1°C, June 11, 2001; minimum, 0.0°C, on many days.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 2,910 microsiemens/cm, Aug. 12; minimum, 1,980 microsiemens/cm, Oct. 6.
 WATER TEMPERATURE: Maximum, 26.7°C, July 12; minimum, 0.0°C, Feb. 10.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	2130	2060	2100	2300	2140	2280	2340	2260	2310	2440	2400	2410
2	2180	2100	2130	2280	2260	2270	2370	2290	2320	2430	2390	2410
3	2190	2070	2140	2280	2250	2270	2360	2300	2340	2440	2400	2420
4	2180	2070	2130	2280	2250	2260	2380	2330	2360	2430	2400	2420
5	2190	2020	2120	2280	2250	2260	2380	2350	2360	2420	2380	2400
6	2160	1980	2110	2290	2240	2270	2380	2350	2370	2430	2350	2400
7	2170	2100	2120	2290	2260	2270	2390	2350	2360	2440	2360	2410
8	2180	2100	2150	2300	2270	2280	2400	2340	2360	2440	2380	2400
9	2190	2150	2170	2300	2270	2290	2390	2330	2360	2430	2380	2400
10	2190	2160	2180	2310	2270	2290	2390	2330	2360	2390	2210	2340
11	2190	2150	2180	2320	2280	2300	2370	2330	2360	2410	2320	2370
12	2200	2180	2190	2310	2280	2300	2370	2330	2360	2410	2380	2400
13	2240	2180	2200	2350	2290	2310	2380	2340	2360	2430	2390	2410
14	2250	2190	2210	2330	2290	2310	2400	2360	2380	2440	2390	2410
15	2230	2200	2210	2320	2300	2310	2390	2350	2370	2440	2390	2420
16	2220	2190	2200	2330	2300	2320	2380	2350	2370	2460	2410	2430
17	2230	2180	2200	2330	2300	2320	2410	2360	2380	2450	2400	2420
18	2230	2180	2200	2330	2310	2320	2390	2350	2370	2450	2390	2420
19	2200	2160	2180	2330	2300	2320	2410	2350	2380	2440	2400	2420
20	2230	2160	2210	2340	2310	2320	2400	2360	2380	2450	2400	2430
21	2230	2170	2210	2340	2310	2320	2440	2350	2380	2460	2400	2430
22	2220	2140	2190	2330	2310	2320	2380	2310	2340	2420	2320	2380
23	2280	2140	2210	2340	2310	2320	2400	2370	2380	2430	2330	2380
24	2280	2160	2230	2350	2310	2330	2430	2390	2400	2460	2370	2420
25	2280	2190	2230	2350	2320	2340	2420	2370	2400	2460	2410	2430
26	2290	2100	2190	2360	2330	2340	2420	2370	2390	2420	2310	2400
27	2280	2090	2230	2350	2310	2340	2400	2370	2390	2430	2310	2390
28	2270	2190	2240	2370	2310	2340	2420	2360	2390	2440	2360	2410
29	2240	2040	2160	2360	2300	2340	2420	2350	2400	2430	2360	2400
30	2260	2120	2180	2360	2270	2330	2420	2390	2400	2390	2360	2380
31	2190	2060	2130	---	---	---	2430	2400	2410	2370	2330	2360
MONTH	2290	1980	2180	2370	2140	2310	2440	2260	2370	2460	2210	2400

07130500 ARKANSAS RIVER BELOW JOHN MARTIN RESERVOIR, CO--Continued

WATER TEMPERATURE (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	18.7	17.8	18.1	12.6	11.0	11.5	4.7	2.0	3.6	2.6	2.0	2.3
2	18.7	17.8	18.2	13.8	10.6	11.6	4.6	2.5	4.0	3.0	1.6	2.3
3	18.8	17.9	18.2	13.8	10.5	11.7	6.3	3.6	4.8	2.6	1.4	2.0
4	18.5	17.6	18.0	13.8	11.0	11.9	7.0	3.0	4.7	2.8	1.5	2.0
5	17.7	17.0	17.4	15.5	10.5	12.5	7.0	4.8	5.6	3.7	1.8	2.6
6	18.2	16.5	17.1	14.3	10.3	12.1	5.4	3.6	4.4	3.6	1.6	2.8
7	17.8	16.0	16.7	14.0	10.3	11.7	4.5	3.3	3.9	4.0	2.4	3.2
8	17.9	15.9	16.7	11.3	9.4	10.4	4.4	1.9	3.2	4.5	2.9	3.7
9	17.7	15.8	16.7	12.7	9.1	10.4	4.9	1.6	3.1	4.8	3.4	4.1
10	17.3	15.9	16.6	12.6	8.2	10.0	3.8	1.6	2.7	6.0	3.1	4.4
11	16.8	15.4	15.9	12.4	8.3	10.1	4.6	2.0	3.5	5.4	2.8	4.3
12	15.5	13.5	14.4	12.8	8.8	10.5	4.3	1.7	3.3	5.4	2.7	4.0
13	14.7	12.9	13.8	12.1	9.0	10.5	3.2	0.9	2.0	4.5	3.2	3.8
14	14.8	13.3	13.9	11.6	9.4	10.1	3.5	1.6	2.7	3.7	1.5	2.8
15	14.3	12.8	13.3	12.0	9.6	10.4	3.9	2.4	3.2	3.8	2.4	3.0
16	14.2	12.2	13.0	11.7	10.0	10.6	3.8	2.3	3.1	3.9	2.2	2.9
17	14.4	12.3	13.1	12.2	9.5	10.5	3.9	2.4	3.3	3.7	1.6	2.8
18	13.6	12.3	12.8	11.5	9.1	10	3.9	1.4	3.2	3.9	1.6	2.8
19	13.2	11.9	12.5	10.9	8.2	9.2	3.9	2.7	3.3	4.0	1.2	2.6
20	13.0	11.9	12.4	10.6	7.8	8.8	4.2	2.6	3.4	3.6	1.6	2.5
21	12.8	11.8	12.2	10.2	7.2	8.3	4.0	2.3	3.0	3.8	1.4	2.7
22	13.0	12.0	12.4	9.2	7.0	8.0	4.6	1.8	3.2	4.6	2.0	3.2
23	13.0	12.0	12.4	8.2	7.1	7.8	3.7	2.4	3.1	3.9	1.7	3.2
24	12.9	12.1	12.5	8.6	6.4	7.2	3.7	2.0	2.9	4.1	1.2	2.7
25	12.6	11.7	12.0	8.7	6.0	7.0	3.7	2.3	2.9	4.0	1.5	2.7
26	12.1	11.1	11.5	6.4	4.7	5.6	3.7	1.1	2.7	4.6	2.0	3.2
27	11.8	10.9	11.2	4.8	2.9	3.9	4.1	1.9	3.0	5.4	2.7	4.0
28	11.6	10.8	11.1	4.4	1.9	3.2	4.1	2.1	3.0	4.7	2.5	3.8
29	12.0	10.8	11.2	4.3	1.9	3.1	3.6	1.9	3.0	3.9	2.0	3.0
30	11.6	10.8	11.1	4.3	2.3	3.3	3.8	2.3	2.8	2.1	0.7	1.7
31	11.7	10.9	11.3	---	---	---	3.3	2.1	2.6	3.4	1.0	2.1
MONTH	18.8	10.8	14.1	15.5	1.9	9.1	7.0	0.9	3.3	6.0	0.7	3.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	3.3	1.6	2.4	5.3	1.3	3.0	12.8	9.1	10.5	14.7	12.7	13.6
2	2.7	1.2	1.9	3.5	0.6	2.1	9.2	7.2	8.2	14.1	13.7	13.9
3	3.5	1.6	2.4	4.4	1.2	2.5	9.5	6.3	7.5	14.3	13.5	13.8
4	3.7	1.2	2.6	5.4	1.1	2.9	10.1	6.1	7.5	13.8	13.3	13.5
5	3.9	1.7	2.8	6.1	2.5	4.3	11.1	6.6	8.3	14.4	13.3	13.7
6	4.1	1.2	2.9	8.3	3.3	5.4	11.1	7.6	9.1	15.5	13.9	14.8
7	4.6	1.8	3.3	7.3	3.9	5.8	10.9	8.5	9.6	15.0	14.1	14.4
8	5.5	2.4	3.7	7.3	4.8	6.0	11.1	9.0	9.6	15.1	14.0	14.5
9	4.7	0.7	2.5	6.3	2.3	4.4	13.9	8.5	10.3	15.4	14.2	14.7
10	3.9	0.0	1.6	9.3	3.7	6.3	10.4	9.1	9.5	15.8	14.1	14.8
11	4.6	2.3	3.3	9.5	5.5	7.3	10.2	9.2	9.6	16.5	14.7	15.5
12	5.1	2.6	3.8	12.9	6.0	8.9	9.7	8.8	9.3	15.7	14.6	15.0
13	6.0	2.5	4.1	10.3	6.4	8.5	10.3	9.2	9.7	16.5	14.3	15.1
14	4.2	2.4	3.6	10.2	7.4	8.7	10.7	9.5	10.0	15.7	14.4	14.9
15	6.2	1.6	3.8	8.7	6.7	7.6	11.7	9.8	10.4	16.7	14.3	15.3
16	6.2	1.4	3.8	9.5	5.5	7.2	13.6	11.2	12.3	16.7	14.5	15.4
17	6.2	3.2	4.8	10.8	5.1	7.7	12.9	12.2	12.5	16.1	14.8	15.2
18	7.3	4.8	5.9	10.0	6.2	8.2	13.5	12.6	13.0	16.8	14.4	15.4
19	6.7	5.2	5.9	11.7	7.4	9.3	13.0	12.3	12.6	17.2	14.9	15.8
20	7.7	4.2	6.0	15.3	7.0	10.5	12.3	12.1	12.2	17.0	14.9	15.8
21	7.5	4.3	6.1	9.3	6.0	7.2	12.7	11.9	12.3	17.0	15.2	16.0
22	10.0	4.0	6.5	9.3	4.9	7.1	12.8	12.1	12.4	17.7	15.8	16.6
23	9.7	5.0	7.2	12.7	5.9	8.6	13.0	12.0	12.5	17.2	15.6	16.2
24	7.8	6.0	7.0	9.2	5.8	7.3	13.7	12.5	12.9	15.8	15.0	15.4
25	7.3	2.6	4.9	6.6	4.5	5.5	12.8	12.4	12.6	16.8	14.8	15.7
26	4.7	0.9	2.8	12.9	4.2	8.0	13.0	12.4	12.7	17.1	15.1	15.9
27	4.8	2.4	3.5	15.3	6.8	10.7	13.3	12.6	12.9	16.6	15.1	15.7
28	7.3	2.4	4.5	11.6	8.5	9.8	13.5	12.7	13.0	17.4	15.3	16.2
29	---	---	---	13.7	7.5	10.1	13.2	12.6	12.8	17.5	15.5	16.4
30	---	---	---	14.9	7.7	10.8	13.5	12.7	13.0	17.9	15.7	16.6
31	---	---	---	16.1	8.3	11.4	---	---	---	17.8	15.7	16.6
MONTH	10.0	0.0	4.1	16.1	0.6	7.2	13.9	6.1	11.0	17.9	12.7	15.2

07133000 ARKANSAS RIVER AT LAMAR, CO

LOCATION.--Lat 38°06'21", long 102°37'05", in NE¹/₄SE¹/₄ sec.30, T.22 S., R.46 W., Prowers County, Hydrologic Unit 11020009, on left bank at left downstream end of downstream bridge on U.S. Highways 50 and 287 (revised), and 1.3 mi north of courthouse in Lamar. Prior to March 6, 2002, at site 75 ft upstream.

DRAINAGE AREA.--19,780 mi², of which 950 mi² is probably noncontributing.

PERIOD OF RECORD.--May 1913 to September 1955, April 1959 to current year. Monthly discharge only for some periods, published in WSP 1311. Statistical summary computed for 1949 to current year, subsequent to completion of John Martin Reservoir. Water-quality data available, November 1963 to September 1965, September 1969 to August 1972, September 2002.

REVISED RECORDS.--WSP 1341: 1921(M), 1945-46(M), drainage area; WDR CO-86-1: 1985.

GAGE.--Water-stage recorder with satellite telemetry and crest stage gage. Elevation of gage is 3,597.39 ft above sea level. See WSP 1731 for history of changes prior to Apr. 4, 1959. Apr. 4, 1959 to Mar. 26, 1968, at site 525 ft upstream at datum 2.42 ft higher. Mar. 27, 1968 to Nov. 17, 1982, at site 375 ft downstream at datum 4.00 ft lower. March 18, 1987 to March 6, 2002, at site 75 ft upstream at same datum.

REMARKS.--Records fair except for Sept. 1-30 and discharges greater than 550 ft³/s, which are poor. Natural flow of stream affected by storage reservoirs, power developments, transbasin and transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants. Flow regulated by John Martin Reservoir (station 07130000) 21 mi upstream since Oct. 1948. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report. Additional water-quality data were collected as part of a water-quality assessment of drought conditions and are published in the "Drought Synoptic Sampling" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	18	8.7	7.8	e16	17	6.0	13	5.0	394	37	12
2	19	17	8.4	13	17	21	6.2	232	5.2	405	33	15
3	19	14	8.4	24	16	20	6.3	349	5.7	398	27	6.9
4	19	13	8.7	23	19	14	6.3	286	34	281	23	5.9
5	20	12	8.4	24	20	7.5	6.5	214	61	91	21	10
6	23	12	8.3	23	13	7.3	6.7	195	72	77	19	19
7	35	11	8.4	21	7.5	7.0	7.4	32	72	62	18	13
8	19	11	8.3	17	7.8	6.9	7.2	22	67	54	18	9.8
9	19	11	8.0	14	11	6.8	6.9	47	67	53	20	9.5
10	19	10	8.1	11	12	6.4	6.4	23	67	49	21	52
11	19	9.7	8.2	8.8	8.6	6.9	57	20	66	49	18	9.6
12	20	9.4	8.1	8.4	8.4	6.3	142	17	61	39	18	8.0
13	19	9.1	7.9	8.2	8.7	6.0	171	19	58	17	25	13
14	19	9.4	7.9	8.1	8.6	6.5	171	22	57	11	33	9.9
15	19	10	7.9	8.1	8.4	7.1	167	18	46	12	35	6.3
16	19	10	7.9	8.2	7.9	7.4	127	17	60	9.0	37	5.8
17	19	11	7.9	8.2	7.6	7.8	152	17	63	5.5	36	5.3
18	19	11	8.0	8.2	7.6	7.5	206	13	495	5.2	38	5.4
19	19	11	8.1	8.1	7.5	7.5	195	9.5	562	12	38	6.1
20	19	10	8.1	8.1	7.5	7.7	30	14	474	18	39	5.4
21	19	9.0	8.2	8.1	7.4	7.4	15	9.6	388	20	34	6.2
22	21	9.2	8.6	7.9	7.4	7.3	11	6.4	383	22	37	5.9
23	24	9.7	8.0	7.7	7.4	7.4	9.2	5.8	388	59	47	6.5
24	23	9.1	7.9	7.5	7.4	7.6	9.1	6.9	390	92	43	6.5
25	20	8.8	7.9	7.4	7.4	8.5	11	5.6	404	99	42	7.4
26	19	8.6	7.9	7.4	14	7.8	8.6	5.3	406	75	43	5.4
27	18	8.6	8.0	7.3	13	7.2	10	5.3	394	66	45	5.3
28	18	9.4	8.0	7.2	17	6.4	8.5	5.2	390	63	102	6.4
29	18	8.7	8.1	7.1	---	5.8	8.3	5.2	392	61	599	4.4
30	18	8.7	7.8	7.6	---	6.0	8.1	5.1	391	46	38	4.2
31	18	---	7.8	16	---	6.0	---	5.0	---	38	13	---
TOTAL	621	319.4	251.9	351.4	301.1	262.0	1582.7	1644.9	6323.9	2682.7	1597	286.1
MEAN	20.03	10.65	8.126	11.34	10.75	8.452	52.76	53.06	210.8	86.54	51.52	9.537
MAX	35	18	8.7	24	20	21	206	349	562	405	599	52
MIN	18	8.6	7.8	7.1	7.4	5.8	6.0	5.0	5.0	5.2	13	4.2
AC-FT	1230	634	500	697	597	520	3140	3260	12540	5320	3170	567

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2002, BY WATER YEAR (WY)

	MEAN	38.47	21.62	30.05	40.38	41.54	41.82	163.4	201.5	284.8	314.1	220.8	90.63
MAX	233	117	350	796	507	516	1089	2143	2087	2457	1547	689	
(WY)	1949	1998	1998	1998	1966	1998	1987	1987	1987	1995	1965	1965	
MIN	0.84	1.81	0.56	0.47	0.72	1.11	5.90	6.41	3.80	10.2	10.9	1.37	
(WY)	1978	1978	1978	1978	1965	1965	1995	1963	1954	1964	1974	1974	

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1949 - 2002	
ANNUAL TOTAL	40684.3		16224.1			
ANNUAL MEAN	111.5		44.45		a124.0	
HIGHEST ANNUAL MEAN					537 1987	
LOWEST ANNUAL MEAN					27.0 1975	
HIGHEST DAILY MEAN	1270	Jun 8	599	Aug 29	b25000 Jun 18 1965	
LOWEST DAILY MEAN	7.8	Dec 30	4.2	Sep 30	c0.00 Dec 5 1953	
ANNUAL SEVEN-DAY MINIMUM	7.9	Dec 25	5.1	May 27	0.21 Jan 10 1965	
MAXIMUM PEAK FLOW			1570	Aug 29	d73800 Jun 18 1965	
MAXIMUM PEAK STAGE			9.29	Aug 29	f16.48 Jun 18 1965	
ANNUAL RUNOFF (AC-FT)	80700		32180		89820	
10 PERCENT EXCEEDS	526		76		415	
50 PERCENT EXCEEDS	20		11		24	
90 PERCENT EXCEEDS	8.9		6.4		4.2	

e Estimated.

a Average discharge for 30 years (water years 1914-43), 298 ft³/s, 215,900 acre-ft/yr, prior to and during construction of John Martin Dam.

b Maximum daily discharge for period of record, 87,300 ft³/s, Jun 5, 1921.

c Also minimum daily discharge for period of record; also occurred at times in 1913-15.

d From current-meter and timed-drift measurement of peak flow, maximum discharge and gage height for period of record, 130,000 ft³/s, (determined by Colorado State Engineer) Jun 5, 1921, from rating curve extended above 10,000 ft³/s, gage height, 14.55 ft, site and datum then in use.

f From floodmarks, site and datum then in use.

07134180 ARKANSAS RIVER NEAR GRANADA, CO

LOCATION.--Lat 38°05'44", long 102°18'37", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.36, T.22 S., R.44 W., Prowers County, Hydrologic Unit 11020009, on left bank at upstream side of end of bridge on U.S. Highway 385, 1.2 mi downstream from headgate of Buffalo Canal, and 2.3 mi north of Granada.

DRAINAGE AREA.--23,707 mi², of which 1,648 mi² is probably noncontributing.

PERIOD OF RECORD.--January 1899 to December 1901 (gage heights only), August to October 1903 (monthly discharge only for some periods, published in WSP 1311), December 1980 to current year.

REVISED RECORDS.--WDR CO-01-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 3,480 ft above sea level, from topographic map. See WSP 1311 for history of changes prior to December 5, 1980.

REMARKS.--Records fair except for Oct. 15 to Nov. 21 and estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, power developments, transbasin and transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants. Flow regulated by John Martin Reservoir (station 07130000) 38 mi upstream since October 1948. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	89	72	71	79	91	e12	e14	e3.8	290	3.9	13
2	73	86	75	72	83	81	e12	e18	e3.7	294	3.7	13
3	73	84	75	79	86	79	e12	141	e3.9	292	3.8	8.8
4	74	79	79	88	86	83	e12	217	e3.9	287	3.7	5.9
5	74	70	79	92	87	76	e12	171	e4.0	167	3.7	5.4
6	75	63	77	95	88	56	e13	161	e4.0	105	3.6	5.2
7	79	60	77	96	80	41	e12	135	e4.0	79	3.5	5.0
8	83	56	76	94	78	40	e13	65	e3.9	50	3.5	4.8
9	79	53	76	91	76	41	e13	25	e3.9	33	3.4	5.4
10	79	50	77	90	77	40	e12	40	e3.8	e22	3.3	28
11	78	47	79	88	78	42	e11	27	e3.7	e15	3.3	61
12	79	45	81	86	77	32	e30	e12	e3.7	e13	3.2	49
13	79	43	78	84	79	24	80	e8.0	e3.9	e10	2.9	52
14	79	60	77	80	85	24	108	e4.5	e3.8	e9.0	3.2	60
15	70	74	78	78	82	23	117	e4.3	e3.9	e8.0	3.2	60
16	62	73	77	76	84	23	119	e4.5	e4.0	e7.0	3.1	57
17	78	71	76	75	86	23	117	e4.0	e4.0	e6.0	3.1	57
18	90	69	78	74	86	24	116	e4.0	e50	e4.3	3.2	60
19	91	65	76	74	84	21	143	e3.9	292	e4.3	3.1	57
20	93	63	77	73	81	e17	130	e3.8	348	e4.5	3.1	e20
21	93	62	78	73	81	e16	62	e3.7	305	e4.5	3.2	e15
22	95	62	81	74	79	e15	34	e3.6	277	e4.3	3.1	e10
23	97	66	78	74	81	e15	28	e3.6	279	e4.3	3.6	e9.7
24	97	66	76	71	80	e14	e18	e3.7	291	e4.4	3.2	9.1
25	96	65	76	74	77	e14	e16	e3.8	301	e4.5	3.2	8.6
26	95	63	75	77	71	e13	18	e4.0	297	e4.8	3.2	8.1
27	96	62	76	76	77	e13	21	e3.9	298	e4.9	3.2	7.9
28	98	62	75	75	86	e13	20	e3.8	293	e4.9	3.2	7.6
29	97	65	72	75	---	e13	18	e3.8	290	e5.0	1240	7.4
30	95	66	72	73	---	e14	18	e3.7	290	e5.0	362	7.9
31	92	---	71	77	---	e13	---	e3.7	---	4.1	42	---
TOTAL	2611	1939	2370	2475	2274	1034	1347	1104.3	3676.9	1750.8	1737.4	718.8
MEAN	84.23	64.63	76.45	79.84	81.21	33.35	44.90	35.62	122.6	56.48	56.05	23.96
MAX	98	89	81	96	88	91	143	217	348	294	1240	61
MIN	62	43	71	71	71	13	11	3.6	3.7	4.1	2.9	4.8
AC-FT	5180	3850	4700	4910	4510	2050	2670	2190	7290	3470	3450	1430

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2002, BY WATER YEAR (WY)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	
MEAN	88.78	103.4	129.5	143.1	134.1	126.4	196.7	320.7	419.1	469.3	278.2	116.0											
MAX	184	306	479	886	495	608	1138	2470	2196	2144	775	430											
(WY)	1984	1998	1998	1998	1998	1998	1998	1998	1998	1995	1999	1984											
MIN	4.15	9.68	35.4	39.8	55.9	22.7	5.68	4.51	9.39	56.5	4.39	4.13											
(WY)	1993	1982	1982	1994	1982	1994	1992	1992	1981	2002	1990	1990											

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1981 - 2002

ANNUAL TOTAL	63384	23038.2	
ANNUAL MEAN	173.7	63.12	216.9
HIGHEST ANNUAL MEAN			597 1987
LOWEST ANNUAL MEAN			59.3 1992
HIGHEST DAILY MEAN	834	Jul 15	4070 May 5 1999
LOWEST DAILY MEAN	18	Apr 30	a2.7 Aug 17 1990
ANNUAL SEVEN-DAY MINIMUM	21	Apr 27	3.0 Aug 14 1990
MAXIMUM PEAK FLOW			2270 Aug 29 b4610 May 5 1999
MAXIMUM PEAK STAGE		10.68 Aug 29	c12.28 May 5 1999
ANNUAL RUNOFF (AC-FT)	125700	45700	157100
10 PERCENT EXCEEDS	553	96	527
50 PERCENT EXCEEDS	105	62	107
90 PERCENT EXCEEDS	54	3.8	8.0

e Estimated.

a Also occurred Aug 18-19, 1990; Minimum daily for period of record, 1 ft³/s, many days in 1903.

b From rating curve extended above 3,470 ft³/s.

c Maximum gage height, 12.38 ft, May 27, 1996.

07134990 WILD HORSE CREEK ABOVE HOLLY, CO

LOCATION.--Lat 38°03'24", long 102°08'16", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 16, T.23 S., R.42 W., Prowers County, Hydrologic Unit 11020009, on left bank 1,000 ft downstream from County Road No. 34, 0.7 mi northwest of Holly, and 0.7 mi upstream from mouth.

DRAINAGE AREA.--270 mi², approximately, of which about 60 mi² is probably noncontributing.

PERIOD OF RECORD.--June 1995 to current year (seasonal records only).

REVISED RECORDS.--WDR CO-01-1: Drainage area

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 3,405 ft above sea level, from topographic map. Prior to Apr. 29, 1997, at site 1,050 ft upstream at datum 3.00 ft higher.

REMARKS.--No estimated daily discharges. Records fair except for discharges above 36 ft³/s and those below 0.2 ft³/s, which are poor. Natural flow of stream affected by diversions for irrigation, ground-water withdrawals, and return flows from irrigated areas, the Buffalo Canal, and the Amity Canal. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 1,270 ft³/s, May 26, 1996, from slope-area measurement of peak flow, gage height, 6.90 ft, from floodmark, site and datum then in use; maximum gage height, 8.63 ft, Aug. 7, 1997, from floodmark; no flow, Aug. 20-21, 2002.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 92 ft³/s, Sept. 10, gage height, 5.01 ft; no flow, Aug. 20-21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	17	---	---	---	---	6.6	5.2	3.8	0.69	0.73	1.2
2	9.3	13	---	---	---	---	6.1	5.2	3.3	0.66	0.82	1.2
3	9.9	14	---	---	---	---	5.5	4.9	2.1	0.65	0.56	1.2
4	12	12	---	---	---	---	4.6	4.3	1.5	0.72	1.9	1.5
5	11	10	---	---	---	---	4.4	4.4	1.5	0.82	5.4	1.1
6	18	11	---	---	---	---	4.4	4.7	1.6	0.83	2.1	1.1
7	30	11	---	---	---	---	4.4	5.1	1.6	0.81	0.63	1.1
8	22	10	---	---	---	---	4.7	5.5	1.7	0.81	0.61	1.1
9	10	9.6	---	---	---	---	4.5	6.1	1.4	0.81	0.77	5.4
10	13	10	---	---	---	---	4.6	6.5	1.3	0.73	0.86	56
11	36	9.7	---	---	---	---	4.3	5.8	1.3	0.76	0.84	7.4
12	59	26	---	---	---	---	4.4	6.1	1.3	0.70	0.76	4.9
13	59	43	---	---	---	---	4.8	8.7	1.2	0.69	0.55	5.1
14	53	40	---	---	---	---	4.5	4.2	1.1	0.68	0.46	5.3
15	52	24	---	---	---	---	4.9	4.2	1.2	0.63	0.42	5.4
16	64	17	---	---	---	---	4.5	4.1	1.3	0.63	0.23	5.7
17	55	17	---	---	---	---	4.3	4.2	1.4	0.56	0.12	6.0
18	38	22	---	---	---	---	4.5	4.2	1.3	0.46	0.05	6.3
19	33	26	---	---	---	---	5.0	4.3	1.3	0.34	0.10	5.3
20	36	33	---	---	---	---	5.3	4.1	2.3	0.24	0.00	22
21	41	31	---	---	---	---	6.0	4.0	1.5	0.13	0.00	16
22	43	31	---	---	---	---	7.2	4.1	1.2	0.09	0.01	15
23	41	32	---	---	---	---	5.3	4.1	1.1	0.48	0.26	8.2
24	37	27	---	---	---	---	5.2	12	1.1	0.71	0.20	4.4
25	47	22	---	---	---	---	5.4	21	1.2	1.1	0.58	4.0
26	45	24	---	---	---	---	5.6	20	1.2	0.66	0.86	3.8
27	44	19	---	---	---	---	5.6	19	1.2	0.63	0.99	2.6
28	48	20	---	---	---	---	5.4	21	0.89	0.65	1.0	1.7
29	43	24	---	---	---	---	5.5	19	0.77	1.9	0.93	2.2
30	34	27	---	---	---	---	5.2	13	0.76	0.69	0.92	1.9
31	25	---	---	---	---	---	---	5.5	---	0.75	0.86	---
TOTAL	1080.2	632.3	---	---	---	---	152.7	244.5	44.42	21.01	24.52	204.1
MEAN	34.85	21.08	---	---	---	---	5.090	7.887	1.481	0.678	0.791	6.803
MAX	64	43	---	---	---	---	7.2	21	3.8	1.9	5.4	56
MIN	9.3	9.6	---	---	---	---	4.3	4.0	0.76	0.09	0.00	1.1
AC-FT	2140	1250	---	---	---	---	303	485	88	42	49	405

07137000 FRONTIER DITCH NEAR COOLIDGE, KS

LOCATION.--Lat 38°02'18", long 102°02'19", in SW 1/4 SE 1/4 NE 1/4 sec.21, T.23 S., R.43 W., Hamilton County, Hydrologic Unit 11030001, on left bank 0.3 mi east of Colorado-Kansas State line, 0.5 mi downstream from Holly drain diversion, 1.5 mi west of Coolidge, and 2.3 mi downstream from diversion of the Arkansas River.

PERIOD OF RECORD.--October 1950 to current year.

REVISED RECORDS.--WSP 1731: 1951.

GAGE.--Water-stage recorders and Parshall flume. Datum of gage is 3,343.14 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. This ditch diverts water from the Arkansas River in Colorado for use in Kansas. These records and records for the Arkansas River near Coolidge represent total flow of the Arkansas River at the Colorado-Kansas State line. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 84 ft³/s Aug. 1, 1975; no flow many days each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	24	23	0.0	0.0	0.0	0.0	30	20	20	26	23
2	24	22	24	0.0	0.0	0.0	0.0	33	17	22	25	23
3	25	22	25	0.0	0.0	0.0	0.0	25	16	26	24	22
4	29	21	25	0.0	0.0	0.0	0.0	25	17	27	21	22
5	29	20	25	0.0	0.0	0.0	0.0	26	17	27	29	22
6	27	20	25	0.0	0.0	0.0	0.0	e26	17	28	22	23
7	24	19	25	0.0	0.0	0.0	0.0	e26	16	24	19	23
8	22	20	24	0.0	0.0	0.0	0.0	26	17	28	20	22
9	19	18	24	0.0	0.0	0.0	0.0	26	15	27	17	26
10	18	17	25	0.0	0.0	0.0	0.0	26	15	27	17	21
11	21	17	25	0.0	0.0	0.0	0.0	26	14	27	16	21
12	26	19	25	0.0	0.0	0.0	0.0	26	14	28	14	21
13	27	26	12	0.0	0.0	0.0	0.0	26	16	27	14	21
14	27	26	0.08	0.0	0.0	0.0	0.0	26	16	26	13	21
15	26	24	0.0	0.0	0.0	0.0	15	26	17	25	12	21
16	26	24	0.0	0.0	0.0	0.0	27	26	16	26	11	19
17	26	23	0.0	0.0	0.0	0.0	25	26	16	23	12	19
18	23	24	0.0	0.0	0.0	0.0	26	26	14	20	15	20
19	22	24	0.0	0.0	0.0	0.0	26	25	19	21	16	20
20	22	26	0.0	0.0	0.0	0.0	26	24	25	31	17	20
21	24	27	0.0	0.0	0.0	0.0	25	23	25	31	16	20
22	24	27	0.0	0.0	0.0	0.0	23	23	25	32	14	20
23	26	27	0.0	0.0	0.0	0.0	19	21	24	30	16	20
24	25	27	0.0	0.0	0.0	0.0	15	24	24	29	16	20
25	26	26	0.0	0.0	0.0	0.0	12	25	24	28	17	20
26	25	26	0.0	0.0	0.0	0.0	11	25	24	30	18	15
27	24	e23	0.0	0.0	0.0	0.0	18	24	23	36	16	0.05
28	25	e23	0.0	0.0	0.0	0.0	26	25	21	33	17	0.00
29	25	e23	0.0	0.0	---	0.0	26	24	23	37	26	0.00
30	25	23	0.0	0.0	---	0.0	25	24	22	32	22	0.00
31	24	---	0.0	0.0	---	0.0	---	23	---	32	17	---
MEAN	24.52	22.93	9.906	0.000	0.000	0.000	11.50	25.39	18.97	27.74	17.90	18.17
MAX	29	27	25	0.00	0.00	0.00	27	33	25	37	29	26
MIN	18	17	0.00	0.00	0.00	0.00	0.00	21	14	20	11	0.00
AC-FT	1510	1360	609	0.00	0.00	0.00	684	1560	1130	1710	1100	1080

CAL YR 2001 MEAN 14.34 MAX 53 MIN 0.00 AC-FT 10380
WTR YR 2002 MEAN 14.84 MAX 37 MIN 0.00 AC-FT 10740

e Estimated.

07137500 ARKANSAS RIVER NEAR COOLIDGE, KS

LOCATION.--Lat 38°01'34", long 102°00'41", in NW ¼ NE ¼ NW ¼ sec.26, T.23 S., R.43 W., Hamilton County, Hydrologic Unit 11030001, on right bank at downstream side of county highway bridge, 1.0 mi south of Coolidge, 1.9 mi downstream from Colorado-Kansas State line, and at mile 1,099.3 .

DRAINAGE AREA.--25,410 mi², of which 1,708 mi² is probably noncontributing.

PERIOD OF RECORD.--May to October 1903, March to May 1921, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS.--WSP 1341: 1903, drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,330.84 ft above sea level. May 5 to Oct. 31, 1903, nonrecording gage, and Mar. 1 to May 31, 1921, water-stage recorder at present site at different datum. Oct. 1, 1950, to Mar. 31, 1966, water-stage recorder at site 0.3 mi upstream at datum 3.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Combined flow of river and Frontier Ditch (station 07137000) represents entire flow that enters Kansas. Flow regulated since Oct. 1948 by John Martin Reservoir (station 07130000). Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation of about 500,000 acres, and return flow from irrigated areas. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	96	103	129	e119	115	73	44	28	250	18	119
2	107	97	106	130	e129	111	69	38	26	258	17	96
3	109	100	107	132	e128	111	65	50	28	256	15	e64
4	122	106	104	141	e128	117	63	104	31	253	13	e45
5	124	99	104	139	e128	117	65	146	30	248	17	39
6	126	97	105	142	e128	115	65	140	33	906	19	35
7	129	100	106	143	127	119	63	139	33	248	20	27
8	127	99	105	143	123	113	65	113	33	151	17	25
9	116	101	105	140	121	104	65	80	28	115	15	33
10	111	104	106	138	115	106	60	70	29	93	15	129
11	113	105	106	135	115	102	62	69	26	99	12	101
12	108	102	109	135	112	91	65	55	26	80	16	84
13	111	101	121	133	e110	92	80	56	26	72	15	73
14	110	99	128	129	117	91	100	51	30	62	14	77
15	105	93	128	124	e122	85	114	44	29	55	15	82
16	105	96	128	125	123	86	120	39	29	48	14	71
17	103	95	127	125	122	87	121	39	34	43	14	64
18	96	97	128	125	123	91	167	34	30	39	12	62
19	95	96	127	124	120	89	153	34	50	34	17	61
20	95	103	125	122	117	87	165	37	185	24	13	64
21	99	103	126	119	114	81	136	34	230	19	14	59
22	100	104	129	118	112	79	123	31	218	24	14	57
23	103	105	127	122	113	81	102	32	213	22	14	56
24	101	107	129	119	116	88	89	42	229	24	15	54
25	103	103	131	118	115	85	81	44	231	24	15	50
26	101	102	135	121	111	83	76	43	242	26	15	51
27	101	96	134	e121	111	80	71	39	246	24	14	49
28	106	97	131	e121	110	77	63	36	244	22	14	49
29	105	101	125	e119	---	79	57	38	239	27	578	50
30	101	101	123	e118	---	82	51	35	238	19	985	49
31	97	---	125	e117	---	72	---	29	---	20	220	---
MEAN	107.6	100.2	119.1	128.0	118.9	94.06	88.30	57.58	103.1	115.6	71.16	62.50
MAX	129	107	135	143	129	119	167	146	246	906	985	129
MIN	95	93	103	117	110	72	51	29	26	19	12	25
AC-FT	6620	5960	7330	7870	6600	5780	5250	3540	6140	7110	4380	3720

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2002, BY WATER YEAR (WY)

MEAN	135.9	123.3	128.5	135.8	141.6	136.0	217.9	323.7	491.2	363.1	335.4	182.6
MAX	332	424	534	972	602	658	1221	2478	8221	2255	1979	1079
(WY)	1998	1998	1998	1998	1966	1998	1987	1999	1965	1995	1965	1965
MIN	1.97	1.53	3.94	3.14	5.52	5.63	9.43	6.61	4.20	3.59	1.94	0.90
(WY)	1979	1979	1979	1979	1978	1978	1979	1963	1954	1974	1964	1960

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1951 - 2002
ANNUAL MEAN	233.1	97.09	226.6
HIGHEST ANNUAL MEAN			1012
LOWEST ANNUAL MEAN			19.8
HIGHEST DAILY MEAN	1170	Jul 15	101000
LOWEST DAILY MEAN	89	Sep 14	0.00
ANNUAL SEVEN-DAY MINIMUM	95	Sep 9	0.00
MAXIMUM PEAK FLOW		2270	158000
MAXIMUM PEAK STAGE		7.32	14.80
ANNUAL RUNOFF (AC-FT)	168700	70290	164200
10 PERCENT EXCEEDS	552	135	461
50 PERCENT EXCEEDS	173	100	130
90 PERCENT EXCEEDS	101	24	10

e Estimated.

08220000 RIO GRANDE NEAR DEL NORTE, CO

LOCATION.--Lat 37°41'22", long 106°27'38", in NW¼ sec.29, T.40 N., R.5 E., Rio Grande County, Hydrologic Unit 13010001, on right bank 20 ft downstream from county highway bridge, 5.0 mi upstream from Pinos Creek, and 6.0 mi west of Del Norte.

DRAINAGE AREA.--1,320 mi², approximately.

PERIOD OF RECORD.--June 1889 to current year. Monthly discharge only for some periods, published in WSP 1312. Water-quality data available, April 1993 to July 1996, September 2002.

REVISED RECORDS.--WSP 763: Drainage area. WSP 1312: 1889, 1901, 1913-14.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 7,980.25 ft above sea level. Prior to May 16, 1908, nonrecording gage at site 4 mi downstream at different datum. May 16, 1908 to Nov. 8, 1910, nonrecording gages on bridge at present site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Small diversions upstream from station for irrigation. Flow regulated by Beaver Creek Reservoir since 1910, Santa Maria Reservoir since 1912, Rio Grande Reservoir since 1912, and Continental Reservoir since 1925, combined capacity, 126,100 acre-ft, and by several smaller reservoirs. Transmountain diversions to drainage area upstream from station from Colorado River basin (see elsewhere in this report).

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1873, that of Oct. 5, 1911, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	283	286	e160	e160	e140	e160	277	462	384	128	118	101
2	283	226	e170	e150	e150	e140	284	459	449	131	107	96
3	284	211	e180	e150	e150	e150	340	449	413	132	112	98
4	274	205	e170	e160	e150	e150	500	486	364	138	125	111
5	265	204	e170	e160	e150	e170	562	535	348	140	128	129
6	256	203	e170	e160	e140	e180	557	565	320	156	143	128
7	258	204	e170	e170	e150	e190	515	599	301	149	178	125
8	260	206	e160	e180	e160	e180	488	637	285	166	170	128
9	267	206	e160	e180	e140	e150	455	614	272	176	155	142
10	291	200	e160	e170	e140	e170	436	577	261	170	151	186
11	275	191	e160	e150	e150	e200	437	526	244	150	141	251
12	267	195	e150	e150	e160	e190	443	508	218	134	135	377
13	269	197	e140	e150	e150	e210	413	488	205	127	114	375
14	261	196	e140	e140	e160	e200	437	492	194	122	104	344
15	258	195	e150	e170	e150	e190	527	527	189	120	91	267
16	257	187	e150	e180	e150	e190	540	570	175	118	88	196
17	265	187	e150	e170	e170	184	466	604	167	107	88	168
18	264	189	e160	e160	e170	188	402	626	158	113	88	158
19	262	178	e150	e140	e170	177	384	644	153	111	88	153
20	256	153	e150	e150	e170	185	386	671	146	115	99	154
21	255	132	e160	e150	e160	199	367	611	141	135	109	145
22	259	159	e160	e170	e160	223	365	563	136	144	114	154
23	259	202	e140	e170	e170	235	348	521	135	141	124	160
24	248	172	e150	e150	e180	223	370	496	134	165	127	165
25	226	156	e150	e150	e160	205	417	423	138	152	120	165
26	218	159	e150	e160	e150	191	432	364	153	175	115	157
27	238	157	e170	e170	e150	205	478	349	157	190	103	154
28	239	e150	e160	e180	e160	234	483	334	146	179	94	171
29	240	e160	e150	e170	---	252	486	320	140	153	95	188
30	238	e170	e160	e160	---	266	449	315	135	140	105	205
31	251	---	e150	e150	---	280	---	328	---	128	108	---
TOTAL	8026	5636	4870	4980	4360	6067	13044	15663	6661	4405	3637	5351
MEAN	259	188	157	161	156	196	435	505	222	142	117	178
MAX	291	286	180	180	180	280	562	671	449	190	178	377
MIN	218	132	140	140	140	140	277	315	134	107	88	96
AC-FT	15920	11180	9660	9880	8650	12030	25870	31070	13210	8740	7210	10610

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1890 - 2002, BY WATER YEAR (WY)

MEAN	486	286	206	189	196	272	765	2512	3127	1421	788	513
MAX	2451	804	420	340	300	646	1999	4449	6240	3451	1800	2001
(WY)	1912	1917	1926	1912	1928	1910	1895	1922	1921	1957	1999	1927
MIN	134	114	105	89.8	111	153	317	505	222	142	117	135
(WY)	1957	1957	1957	1977	1977	1965	1951	2002	2002	2002	2002	1956

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1890 - 2002
ANNUAL TOTAL	365708	82700	
ANNUAL MEAN	1002	227	902
HIGHEST ANNUAL MEAN			1482
LOWEST ANNUAL MEAN			227
HIGHEST DAILY MEAN	5910	May 28	14000
LOWEST DAILY MEAN	120	Jan 17	69
ANNUAL SEVEN-DAY MINIMUM	126	Jan 16	92
MAXIMUM PEAK FLOW			689
MAXIMUM PEAK STAGE			bl.66
ANNUAL RUNOFF (AC-FT)	725400	164000	653300
10 PERCENT EXCEEDS	3200	449	2480
50 PERCENT EXCEEDS	294	170	362
90 PERCENT EXCEEDS	140	128	165

e Estimated.

a From rating curve extended above 12900 ft³/s.

b Maximum gage height, 2.81 ft, Mar 9, backwater from ice.

CLOSED BASIN IN SAN LUIS VALLEY, CO

08224500 KERBER CREEK ABOVE LITTLE KERBER CREEK NEAR VILLA GROVE, CO
(Formerly published as Kerber Creek at Ashley Ranch, near Villa Grove)

LOCATION (REVISED).--Lat 38°13'13", long 106°05'21", in SW¼SE¼ sec.21, T.46 N., R.8 E., Saguache County, Hydrologic Unit 13010003, on left bank 3.0 mi upstream from Little Kerber Creek, and 7 mi west of Villa Grove. Prior to June 25, 2002, at site 1.5 mi upstream.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--November 1911 to June 1912 and June 1923 to September 1926 (published as Kerber Creek near Villa Grove). May 1936 to September 1982, October 1998 to current year. Published as "at Ashley Ranch" May 1936 to September 1982 and October 1998 to September 2001. Monthly discharge only for some periods, published in WSP 1312.

REVISED RECORDS.--WSP 1312: 1943. WSP 1512: 1943.

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Elevation of gage is 8,640 ft above sea level, from topographic map. Prior to June 1, 1923, nonrecording gage at site 2.5 mi downstream at different datum. June 1, 1923 to Sept. 16, 1926, and May 2, 1936 to June 24, 2002, at several sites 1.5 mi upstream, at different datums.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by several small diversions for irrigation, and return flow from irrigated areas.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1872, that of May 14, 1941, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	3.7	e1.5	e1.6	e1.1	e1.6	e5.0	5.6	4.6	0.93	0.33	0.34
2	3.5	3.2	e1.7	e1.2	e1.5	e1.3	e5.0	5.2	4.3	0.96	0.42	0.24
3	3.2	3.5	e1.9	e1.2	e1.3	e1.3	e5.4	5.2	4.3	1.2	0.49	0.19
4	3.0	3.4	e1.7	e1.5	e1.4	e1.7	e6.0	5.2	4.9	1.0	0.54	0.28
5	3.0	3.5	e1.7	e1.5	e1.6	e2.0	e5.8	5.2	5.9	1.4	0.71	0.30
6	3.2	3.5	e1.7	e1.7	e1.6	e2.2	e5.8	5.2	4.3	1.3	1.5	0.18
7	3.5	3.5	e1.7	e1.9	e1.6	e2.6	e6.2	5.6	4.0	1.2	1.7	0.22
8	3.7	3.7	e1.6	e1.7	e1.6	e2.5	e5.8	5.6	3.6	0.80	1.2	1.1
9	3.7	2.9	e1.5	e1.7	e1.6	e2.3	e6.2	5.2	3.2	0.76	0.89	0.99
10	3.5	2.4	e1.5	e1.7	e1.7	e2.5	e6.0	5.6	3.0	1.6	0.62	3.7
11	3.0	2.7	e1.5	e1.5	e1.8	e2.8	6.2	5.2	2.7	1.4	0.27	2.5
12	3.0	3.0	e1.7	e1.5	e1.9	e2.7	5.9	5.2	2.5	0.83	0.11	2.2
13	2.7	2.9	e1.6	e1.4	e1.8	e2.7	7.0	5.6	2.3	0.50	0.06	2.0
14	3.0	3.0	e1.7	e1.3	e1.9	e2.7	7.0	5.2	2.3	0.38	0.03	1.7
15	3.0	2.9	e1.6	e1.4	e1.9	e2.7	7.4	5.2	2.1	0.38	0.02	1.4
16	2.8	2.7	e1.5	e1.6	e1.8	e2.7	7.4	5.2	1.9	0.42	0.01	1.2
17	3.0	2.8	e1.6	e1.5	e2.0	e2.5	6.9	4.9	1.9	0.35	0.01	1.1
18	3.2	2.7	e1.6	e1.3	e2.1	e2.7	5.6	5.2	1.7	0.24	0.01	1.3
19	3.0	1.7	e1.5	e1.4	e2.3	e2.7	5.6	5.6	1.5	0.20	0.01	2.9
20	3.0	e1.5	e1.5	e1.5	e2.1	e2.7	5.9	5.9	1.5	0.17	0.03	2.5
21	3.2	e1.5	e1.6	e1.7	e2.0	e2.6	4.9	5.9	1.5	0.52	0.18	2.2
22	3.5	e1.8	e1.7	e1.6	e2.0	e2.9	4.9	5.6	2.5	0.52	0.74	2.0
23	3.5	e2.2	e1.5	e1.6	e2.1	e3.1	4.6	5.6	2.1	0.61	0.44	1.7
24	2.7	e1.8	e1.4	e1.6	e2.1	e3.2	4.9	5.6	1.7	0.60	0.34	1.6
25	2.6	e2.0	e1.5	e1.6	e2.0	e3.1	5.6	4.9	1.5	1.0	0.20	1.5
26	3.0	e1.7	e1.6	e1.7	e1.8	e3.0	5.6	5.2	1.3	1.3	0.11	1.7
27	3.1	e1.5	e1.7	e1.7	e1.9	e3.2	5.6	5.2	1.4	0.76	0.06	2.0
28	3.5	e1.2	e1.6	e1.8	e1.8	e3.7	5.2	5.2	1.4	0.36	0.05	2.7
29	3.5	e1.4	e1.6	e1.6	---	e4.3	5.2	4.6	1.9	0.21	0.20	2.7
30	3.5	e1.7	e1.8	e1.5	---	e5.0	5.2	4.5	1.1	0.25	0.66	2.5
31	3.7	---	e1.7	e1.3	---	e5.0	---	4.6	---	0.40	0.53	---
TOTAL	99.0	76.0	50.0	47.8	50.3	86.0	173.8	163.7	78.9	22.55	12.47	46.94
MEAN	3.19	2.53	1.61	1.54	1.80	2.77	5.79	5.28	2.63	0.73	0.40	1.56
MAX	3.7	3.7	1.9	1.9	2.3	5.0	7.4	5.9	5.9	1.6	1.7	3.7
MIN	2.6	1.2	1.4	1.2	1.1	1.3	4.6	4.5	1.1	0.17	0.01	0.18
AC-FT	196	151	99	95	100	171	345	325	156	45	25	93

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 2002, BY WATER YEAR (WY)

MEAN	4.88	4.23	3.01	2.70	3.06	5.03	14.8	45.7	38.5	12.0	7.90	5.05
MAX	16.1	10.0	6.50	6.00	6.00	12.0	44.4	130	102	61.9	42.3	25.6
(WY)	1939	1958	1966	1966	1958	1924	1924	1942	1941	1957	1957	1957
MIN	1.99	1.82	1.30	0.000	0.86	1.50	5.79	5.28	2.63	0.73	0.40	1.08
(WY)	1951	1956	1964	1977	1972	1964	2002	2002	2002	2002	2002	1956

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

(a) WATER YEARS 1923 - 2002

ANNUAL TOTAL	5434.8	907.46										
ANNUAL MEAN	14.9	2.49								12.2		
HIGHEST ANNUAL MEAN										25.4		1924
LOWEST ANNUAL MEAN										2.49		2002
HIGHEST DAILY MEAN	186	May 17				7.4	Apr 15		363	May 14		1941
LOWEST DAILY MEAN	e1.2	Nov 28				0.01	Aug 16		b0.00	Dec 30		1976
ANNUAL SEVEN-DAY MINIMUM	e1.5	Nov 26				0.02	Aug 14		0.00	Dec 30		1976
MAXIMUM PEAK FLOW						8.2	Apr 15		c407	May 14		1941
MAXIMUM PEAK STAGE						f0.85	Apr 15		d3.88	May 14		1941
ANNUAL RUNOFF (AC-FT)	10780					1800			8860			
10 PERCENT EXCEEDS	39					5.2			31			
50 PERCENT EXCEEDS	3.6					1.9			4.5			
90 PERCENT EXCEEDS	1.7					0.42			2.2			

e Estimated.

a Water years 1983, and 1994 to 1998 data were published by the Colorado Division of Water Resources. Station was not operated during water years 1984 to 1993.

b Also occurred Dec 31, 1976 to Jan 31, 1977.

c From rating curve extended above 140 ft³/s.

d Maximum gage height, 5.04 ft, May 11, 1947, site and datum then in use, backwater from beaver dam.

f Maximum gage height, 0.91 ft, Nov 21, backwater from ice.

CLOSED BASIN IN SAN LUIS VALLEY, CO

08227000 SAGUACHE CREEK NEAR SAGUACHE, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1967 to September 1968, April 1993 to August 1995, April 2001 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	ALKALINITY WAT DIS TOT IT MG/L AS CACO3 (39086)	BICARBONATE WATER DIS IT MG/L AS HCO3 (00453)	CARBONATE WATER DIS IT MG/L AS CO3 (00452)	CHLORIDE, DIS-SOLVED (MG/L) (00940)	SULFATE DIS-SOLVED (MG/L) (00945)	NITROGEN, AMMONIA DIS-SOLVED (MG/L) (00608)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L) (00625)
OCT 23...	1230	40	9.0	7.7	137	8.5	63	76	0	1.56	4.0	<.04	.22
NOV 28...	1320	22	8.9	8.0	--	.5	62	75	0	1.85	5.9	<.04	.29
JAN 03...	1530	24	10.7	7.5	133	.0	58	70	0	2.18	5.3	<.04	.20
FEB 01...	1450	e20	10.7	7.4	143	.0	57	69	0	1.72	5.0	E.02	.27
MAR 21...	1330	56	9.7	7.9	123	.5	56	68	0	1.50	5.6	<.04	.50
APR 25...	1300	34	9.5	7.8	131	8.5	61	74	0	1.48	4.3	<.04	.25
JUN 18...	1350	15	7.7	8.4	161	20.0	75	88	1	1.39	4.5	<.04	.28
JUL 10...	1650	18	7.1	8.9	160	22.5	72	e86	e0	1.40	3.9	<.04	.47
AUG 13...	1400	12	8.7	8.6	165	17.5	75	88	2	1.92	3.5	<.04	.28

Date	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)	NITROGEN, NITRITE DIS-SOLVED (MG/L) (00613)	ORTHO-PHOSPHATE, DIS-SOLVED (MG/L) (00671)	PHOSPHORUS TOTAL (MG/L) (00665)	SEDIMENT, SUSPENDED (MG/L) (80154)	DISCHARGE, SUSPENDED (T/DAY) (80155)
OCT 23...	<.05	<.008	.06	.103	8.0	.86
NOV 28...	.07	<.008	.06	.160	112	6.7
JAN 03...	.11	<.008	.05	.089	6.2	.40
FEB 01...	.08	<.008	.05	.089	24	1.3e
MAR 21...	E.03	<.008	.05	.26	141	21.2
APR 25...	E.03	<.008	.06	.094	9.5	.88
JUN 18...	<.05	<.008	.09	.141	5.5	.22
JUL 10...	<.05	<.008	.11	.183	11	.54
AUG 13...	<.05	<.008	.08	.139	6.3	.21

e Estimated value.
E Estimated laboratory analysis value.

RIO GRANDE BASIN

CLOSED BASIN IN SAN LUIS VALLEY

08231000 LA GARITA CREEK NEAR LA GARITA, CO

LOCATION.--Lat 37°48'48", long 106°19'05" (revised), in NW¼SE¼ sec.9, T.41 N., R.6 E., Saguache County, Hydrologic Unit 13010004, on right bank 4.5 mi downstream from Little La Garita Creek and 4.5 mi southwest of La Garita.

DRAINAGE AREA.--61 mi², approximately.

PERIOD OF RECORD.--April 1919 to September 1981. October 1998 to current year. No winter records prior to water year 1948 except water years 1926, 1941, and 1945-46. Monthly discharge only for some periods, published in WSP 1312. October 1981 to September 1998, in reports of State Engineer.

REVISED RECORDS.--WSP 1312: 1946(M).

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 8,030 ft, from topographic map. Apr. 1, 1919 to June 23, 1927, nonrecording gages, and June 24, 1927 to Nov. 13, 1935, water-stage recorder, at sites within 0.2 mi downstream at different datums. Nov. 14, 1935 to Nov. 16, 1966, at datum 1.00 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by diversions for irrigation and return flows from irrigated areas.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	5.1	e3.2	e4.2	e1.8	e3.0	13	4.9	3.2	1.6	1.1	1.6
2	6.2	5.2	e3.6	e3.0	e2.4	e2.2	17	4.6	3.0	1.4	1.3	1.5
3	6.0	5.4	e4.2	e2.8	e2.2	e2.2	13	4.7	2.8	1.6	1.9	1.5
4	5.8	5.1	e3.8	e3.8	e2.4	e2.8	10	4.8	3.0	2.0	2.8	1.6
5	5.6	5.2	e3.6	e3.4	e2.6	e3.4	10	4.5	3.5	2.5	3.3	1.7
6	5.6	5.3	e3.6	e4.4	e2.4	e4.0	7.9	4.5	3.0	2.6	3.0	1.4
7	5.6	5.4	e3.6	e4.8	e2.4	e4.6	7.7	4.4	2.6	3.0	2.6	1.4
8	5.9	5.6	e3.2	e4.6	e2.4	e3.8	5.9	4.4	2.5	3.0	3.3	2.0
9	6.2	4.7	e3.2	e4.6	e2.4	e3.2	6.8	4.3	2.2	2.3	2.9	2.2
10	6.2	4.3	e3.4	e4.6	e2.2	e3.4	7.3	4.5	2.1	2.2	1.9	7.3
11	5.4	4.5	e3.4	e4.2	e2.6	e4.2	6.3	4.2	2.0	2.1	1.4	4.8
12	6.5	4.8	e4.0	e4.2	e2.8	e4.2	6.3	4.4	1.9	1.8	1.1	3.7
13	5.2	5.3	e3.8	e4.0	e2.4	e4.4	6.2	4.7	2.0	1.3	0.87	2.9
14	6.0	4.7	e3.8	e3.2	e2.6	e3.8	7.2	4.4	1.9	1.1	0.84	2.9
15	5.9	4.6	e3.6	e3.6	e2.6	e3.8	7.6	4.4	2.2	1.3	0.76	2.5
16	5.3	4.0	e3.4	e4.4	e2.4	e4.0	6.8	4.2	2.1	2.3	0.63	2.0
17	5.7	4.3	e3.6	e3.8	e2.8	e3.2	5.5	4.1	1.8	1.9	0.66	1.9
18	5.8	4.2	e3.9	e3.0	e3.0	e3.8	5.4	4.1	1.7	1.3	0.73	1.9
19	5.3	e3.6	e3.6	e3.2	e3.6	e4.0	5.2	4.3	1.7	1.1	0.90	2.9
20	5.4	3.1	e3.6	e3.2	e3.4	e4.6	5.2	4.5	1.8	1.0	1.2	2.7
21	5.6	3.8	e3.8	e3.6	e3.0	e4.8	4.5	4.6	1.8	1.4	1.9	2.4
22	5.9	e4.4	e4.2	e3.6	e3.2	5.4	5.0	4.0	1.8	1.6	2.5	2.2
23	5.3	e5.0	e3.4	e3.2	e3.6	6.0	5.0	3.9	1.7	1.7	2.0	2.0
24	5.6	e4.4	e3.2	e3.2	e3.8	6.3	5.2	4.1	1.6	1.7	1.5	1.8
25	4.8	e4.4	e3.5	e3.2	e3.4	4.2	5.1	4.1	1.5	1.7	1.1	2.1
26	5.5	e3.8	e4.2	e3.4	e2.8	e6.0	5.3	4.0	1.8	2.6	0.92	2.5
27	5.8	e3.4	e4.6	e3.8	e3.2	e7.0	5.9	4.1	2.0	2.4	0.86	2.7
28	6.3	e2.8	e4.2	e4.0	e3.4	e8.0	5.7	4.0	2.1	1.8	0.84	3.0
29	5.8	e3.0	e4.0	e3.6	---	e9.0	5.1	3.7	2.1	1.5	1.7	3.0
30	5.8	e3.4	e4.8	e3.2	---	e10	5.0	3.4	1.8	1.2	2.5	3.3
31	5.9	---	e4.4	e2.2	---	e12	---	3.2	---	1.1	2.0	---
TOTAL	178.3	132.8	116.4	114.0	77.8	151.3	212.1	132.0	65.2	56.1	51.01	75.4
MEAN	5.75	4.43	3.75	3.68	2.78	4.88	7.07	4.26	2.17	1.81	1.65	2.51
MAX	6.5	5.6	4.8	4.8	3.8	12	17	4.9	3.5	3.0	3.3	7.3
MIN	4.8	2.8	3.2	2.2	1.8	2.2	4.5	3.2	1.5	1.0	0.63	1.4
AC-FT	354	263	231	226	154	300	421	262	129	111	101	150

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1919 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	6.99	5.24	3.93	3.37	4.05	5.79	17.1	46.6	30.8	14.7	15.5	8.68
MAX	42.6	18.5	8.72	6.60	8.00	9.94	126	211	126	65.3	70.2	52.4
(WY)	1924	1970	1970	1966	1962	1972	1924	1924	1921	1921	1929	1923
MIN	1.46	1.80	0.70	0.50	0.50	1.50	6.08	4.26	2.17	1.81	1.65	0.85
(WY)	1957	1941	1964	1964	1964	1964	1978	2002	2002	2002	2002	1956

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		(a)WATER YEARS 1919 - 2002	
ANNUAL TOTAL	6644.8		1362.41			
ANNUAL MEAN	18.2		3.73		12.5	
HIGHEST ANNUAL MEAN					30.8	
LOWEST ANNUAL MEAN					3.73	
HIGHEST DAILY MEAN	154	May 20	17	Apr 2	398	May 16 1941
LOWEST DAILY MEAN	e2.3	Jan 17	0.63	Aug 16	b0.20	Sep 28 1956
ANNUAL SEVEN-DAY MINIMUM	e2.7	Jan 14	0.77	Aug 13	0.43	Sep 27 1956
MAXIMUM PEAK FLOW			30	Apr 1	c530	Jul 9 1957
MAXIMUM PEAK STAGE			2.50	Apr 1	d4.00	Jul 9 1957
ANNUAL RUNOFF (AC-FT)	13180		2700		9080	
10 PERCENT EXCEEDS	49		5.9		27	
50 PERCENT EXCEEDS	6.1		3.6		5.6	
90 PERCENT EXCEEDS	3.4		1.6		2.5	

e Estimated.

a Water years 1919-1981 and 1999 to current year.

b Also occurred Sep 29, 1956.

c From rating curve extended above 140 ft³/s.

d Present datum; maximum gage height, 5.11 ft, May 16, 1941, datum then in use.

CLOSED BASIN IN SAN LUIS VALLEY, CO

372833105455800 CLOSED BASIN PROJECT CANAL NEAR ALAMOSA, CO

LOCATION.--Lat 37°28'33", long 105°45'58", in SW¹/₄SW¹/₄ sec.3, T.37 N., R.11 E., Alamosa County, Hydrologic Unit 13010002, on right bank of Closed Basin Project Canal, 400 ft north of State Highway 160, and 5.5 mi east of Alamosa.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Water-stage recorders with satellite telemetry and 12 ft Parshall flume. Elevation of gage is 7531.15 ft (levels by U.S. Bureau of Reclamation).

REMARKS.--Records good except for estimated daily discharges, which are fair. The Closed Basin Project Canal delivers water from the Closed Basin in the San Luis Valley to the Rio Grande just downstream from Alamosa. Shallow (unconfined) aquifer water is pumped into the canal by a system of pumps.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	24	29	29	30	26	28	23	17	16	16	19
2	22	23	29	28	30	27	29	25	15	12	16	19
3	20	22	29	28	30	26	26	25	15	11	18	19
4	20	27	28	28	29	26	27	25	18	13	18	19
5	20	28	29	29	28	28	27	26	23	18	19	19
6	21	28	29	28	28	29	27	27	19	19	19	19
7	21	29	28	28	28	26	27	25	20	16	19	19
8	23	29	27	28	27	28	26	24	18	12	21	20
9	24	28	27	28	26	28	30	23	20	15	21	20
10	23	28	27	28	26	27	26	20	20	16	21	21
11	24	29	27	27	25	29	22	21	18	16	20	21
12	26	29	28	28	28	30	26	22	18	17	20	21
13	27	28	28	28	29	27	26	22	18	15	21	21
14	26	29	27	28	28	27	26	21	18	16	21	22
15	24	29	27	28	28	28	25	20	17	18	22	23
16	23	30	27	28	28	25	26	20	18	15	21	23
17	24	29	27	29	28	24	25	21	17	15	21	23
18	25	29	27	29	27	26	25	21	17	15	21	25
19	26	30	27	29	28	29	25	21	17	17	21	26
20	25	29	27	29	28	28	24	21	17	14	21	26
21	26	28	28	29	28	29	27	16	17	14	21	26
22	26	27	28	29	27	28	28	17	17	14	20	26
23	27	28	28	29	27	26	28	19	18	15	20	26
24	29	28	28	29	27	28	28	20	17	15	20	26
25	28	26	28	30	27	29	27	16	17	16	20	27
26	28	28	28	31	e27	30	27	23	17	17	20	30
27	28	29	29	31	27	28	25	22	17	18	19	32
28	28	29	29	29	27	29	25	21	17	17	18	30
29	27	29	30	e30	---	30	24	20	17	17	18	29
30	26	29	30	29	---	29	23	20	17	16	18	29
31	25	---	29	29	---	27	---	20	---	16	19	---
TOTAL	764	838	869	890	776	857	785	667	531	481	610	706
MEAN	24.6	27.9	28.0	28.7	27.7	27.6	26.2	21.5	17.7	15.5	19.7	23.5
MAX	29	30	30	31	30	30	30	27	23	19	22	32
MIN	20	22	27	27	25	24	22	16	15	11	16	19
AC-FT	1520	1660	1720	1770	1540	1700	1560	1320	1050	954	1210	1400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)

	1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002
MEAN	24.6	25.3	30.1	34.2	33.2	30.0	29.1	27.5	25.0	23.3	19.9	23.1
MAX	35.0	31.6	35.7	42.4	38.1	32.5	34.7	34.3	32.9	35.1	28.1	33.0
(WY)	2000	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999
MIN	11.2	17.6	26.0	28.7	27.7	27.6	24.3	21.5	17.7	15.5	13.0	12.7
(WY)	2001	2000	2001	2002	2002	2002	2001	2002	2002	2002	2000	2000

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1999 - 2002

ANNUAL TOTAL	9748	8774		
ANNUAL MEAN	26.7	24.0		27.1
HIGHEST ANNUAL MEAN				33.8
LOWEST ANNUAL MEAN				24.0
HIGHEST DAILY MEAN	36	Jun 23	32	Sep 27
LOWEST DAILY MEAN	10	Aug 2	11	Jul 3
ANNUAL SEVEN-DAY MINIMUM	13	Jul 31	14	Jul 2
MAXIMUM PEAK FLOW			34	Jan 31
MAXIMUM PEAK STAGE			a0.84	Jan 31
ANNUAL RUNOFF (AC-FT)	19340	17400		19620
10 PERCENT EXCEEDS	32	29		36
50 PERCENT EXCEEDS	27	26		28
90 PERCENT EXCEEDS	21	17		16

e Estimated.

a Maximum gage height, 1.92 ft, Jan 29, 2002, backwater from ice.

08242500 UTE CREEK NEAR FORT GARLAND, CO

LOCATION.--Lat 37°26'50", long 105°25'33" (revised), Costilla County, Hydrologic Unit 13010002, in Sangre de Cristo Grant, on left bank 2,300 ft upstream from Newton ditch, 1.4 mi north of Fort Garland, and 5.7 mi upstream from mouth.

DRAINAGE AREA.--32 mi², approximately.

PERIOD OF RECORD.--March to October 1916, May 1923 to September 1981, October 1998 to current year. Monthly discharge only for some periods, published in WSP 1312. October 1981 to September 1998, in reports of State Engineer.

GAGE.--Water-stage recorder with satellite telemetry. Concrete control since Sept. 1973. Elevation of gage is 8,045 ft above sea level, from topographic map. Mar. 18 to Oct. 9, 1916, nonrecording gage and Cippoletti weir at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by diversions for irrigation and return flows from irrigated areas.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

EXTREMES OUTSIDE PERIOD OF RECORD.--Outstanding floods occurred in 1886 and in October 1911. The flood in 1886 probably exceeded the flood in October 1911 which has probably not yet been exceeded, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	5.7	e3.9	e3.9	e3.2	e4.0	e8.0	5.3	3.3	0.02	0.00	0.00
2	7.3	5.2	e4.2	e3.9	e3.6	e3.8	e7.8	5.2	3.4	0.01	0.00	0.00
3	6.7	5.2	e4.6	e3.9	e3.4	e3.8	e7.8	5.2	3.2	0.00	0.00	0.00
4	6.5	5.2	e4.5	e4.1	e3.6	e4.2	e8.0	5.0	3.3	0.00	0.00	0.00
5	6.4	5.1	e4.3	e4.2	e3.8	e4.4	8.0	5.2	4.1	0.20	0.00	0.00
6	6.5	5.0	e4.2	e4.3	e3.6	e5.0	8.0	5.5	3.3	1.1	0.00	0.00
7	6.5	5.9	e3.8	e4.3	e3.9	e5.2	7.6	5.5	2.8	2.2	0.00	0.00
8	6.7	6.2	e3.7	e4.1	e4.3	e4.7	6.9	5.7	2.4	2.1	0.00	0.00
9	6.7	6.1	e3.6	e4.1	e4.1	e4.7	6.7	5.5	2.1	1.3	0.00	0.00
10	6.9	5.7	e3.7	e3.9	e3.9	e5.0	6.9	5.0	1.9	0.93	0.00	0.02
11	6.6	5.7	e3.8	e3.9	e4.1	e5.2	6.8	4.6	1.7	0.65	0.00	4.6
12	7.3	5.8	e3.7	e3.9	e4.5	e5.6	6.8	4.6	1.4	0.46	0.00	6.9
13	7.2	5.8	e3.4	e4.0	e4.3	e6.0	7.0	4.9	1.2	0.14	0.00	4.7
14	7.5	5.7	e3.6	e3.9	e4.7	e6.4	7.2	4.8	1.2	0.03	0.00	4.1
15	7.0	5.6	e3.7	e4.1	e4.4	e6.4	8.1	4.7	1.2	0.02	0.00	3.7
16	6.8	5.3	e3.6	e4.5	e4.2	e6.4	8.4	4.7	1.0	0.01	0.00	4.0
17	6.8	5.4	e3.7	e4.3	e4.6	e6.4	7.2	4.8	0.75	0.00	0.00	3.5
18	6.7	5.2	e3.9	e4.1	e4.8	e6.8	6.4	4.9	e0.30	0.00	0.00	4.3
19	6.6	5.2	e4.0	e4.0	e4.6	e6.6	6.1	5.9	e0.02	0.00	0.00	6.9
20	6.5	4.2	e3.9	e4.0	e4.6	e6.8	6.1	5.8	0.01	0.00	0.00	6.2
21	6.5	4.2	e4.2	e4.0	e4.3	e6.8	5.5	5.5	0.00	0.00	0.00	6.0
22	7.2	5.5	e4.2	e4.3	e4.5	e7.0	5.7	5.1	0.02	0.00	0.00	6.0
23	6.8	5.6	e3.9	e4.1	e4.9	e7.2	5.6	4.7	0.04	0.00	0.00	5.9
24	6.5	3.8	e3.8	e4.0	e4.9	e7.2	5.8	4.6	0.02	0.00	0.00	4.5
25	5.9	e4.0	e3.9	e4.0	e4.6	e7.0	6.2	4.2	0.00	0.00	0.00	3.2
26	6.4	e3.8	e3.9	e4.0	e4.2	e7.0	6.9	3.9	0.00	0.00	0.00	2.9
27	6.3	e3.6	e4.1	e4.2	e4.4	e7.6	6.6	3.8	0.00	0.00	0.00	4.0
28	6.3	e3.5	e4.2	e4.4	e4.4	e7.6	5.7	4.0	0.01	0.00	0.00	6.7
29	6.4	e3.6	e4.1	e4.2	---	e7.4	5.6	3.6	0.05	0.00	0.00	8.6
30	6.6	e3.9	e4.1	e4.0	---	e7.6	5.3	3.3	0.03	0.00	0.00	6.9
31	6.4	---	e4.0	e3.6	---	e7.6	---	3.4	---	0.00	0.00	---
TOTAL	207.1	150.7	122.2	126.2	118.4	187.4	204.7	148.9	38.75	9.17	0.00	103.62
MEAN	6.68	5.02	3.94	4.07	4.23	6.05	6.82	4.80	1.29	0.30	0.000	3.45
MAX	7.5	6.2	4.6	4.5	4.9	7.6	8.4	5.9	4.1	2.2	0.00	8.6
MIN	5.9	3.5	3.4	3.6	3.2	3.8	5.3	3.3	0.00	0.00	0.00	0.00
AC-FT	411	299	242	250	235	372	406	295	77	18	0.00	206

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 2002, BY WATER YEAR (WY)

MEAN	9.96	7.69	5.13	4.59	5.01	7.27	21.6	53.6	55.1	29.1	20.1	12.6
MAX	34.8	25.3	10.5	9.50	10.0	12.6	66.9	220	150	97.0	65.5	45.7
(WY)	1924	1924	1971	1962	1962	1960	1932	1941	1941	1941	1936	1929
MIN	0.91	0.78	0.50	1.60	2.00	3.16	4.69	4.80	1.29	0.30	0.000	0.070
(WY)	1957	1952	1957	1957	1956	1957	1955	2002	2002	2002	2002	1956

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR (a) WATER YEARS 1923 - 2002

ANNUAL TOTAL	6875.1	1417.14										
ANNUAL MEAN	18.8	3.88								19.4		
HIGHEST ANNUAL MEAN										50.2		1941
LOWEST ANNUAL MEAN										3.88		2002
HIGHEST DAILY MEAN	132	May 20				8.6	Sep 29			630	May 15	1941
LOWEST DAILY MEAN	e2.9	Jan 18				0.00	Jun 21			b0.00	Jul 28	1956
ANNUAL SEVEN-DAY MINIMUM	e3.1	Jan 16				0.00	Jul 17			0.00	Sep 6	1956
MAXIMUM PEAK FLOW						9.6	Sep 28			c630	May 15	1941
MAXIMUM PEAK STAGE						d1.63	Sep 28					
ANNUAL RUNOFF (AC-FT)	13640					2810				14020		
10 PERCENT EXCEEDS	51					6.8				52		
50 PERCENT EXCEEDS	6.8					4.2				8.2		
90 PERCENT EXCEEDS	3.8					0.00				3.8		

e Estimated.

a Water years 1923-81 and 1999 to current year.

b Also occurred Jul 29-31 and Sep 5-29, 1956, and many days in 2002.

c Maximum daily discharge.

d Maximum gage height, 2.38 ft, Dec 8, backwater from ice.

08245000 CONEJOS RIVER BELOW PLATORO RESERVOIR, CO

LOCATION.--Lat 37°21'18", long 106°32'37", Conejos County, Hydrologic Unit 13010005, Rio Grande National Forest (revised), on left bank 1,100 ft downstream from valvehouse for Platoro Reservoir and 0.7 mi northwest of Platoro.

DRAINAGE AREA.--40 mi², approximately.

PERIOD OF RECORD.--May 1952 to current year.

GAGE.--Water-stage recorder with satellite telemetry, and concrete control. Datum of gage is 9,866.60 ft above sea level, (levels by U.S. Bureau of Reclamation).

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow completely regulated by Platoro Reservoir (station 08244500) 0.2 mi upstream since Nov. 7, 1951.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 5, 1911, is the greatest since at least 1854, from information obtained from local residents in 1959.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	22	e7.0	e7.1	e7.3	e7.5	e10	48	202	13	15	4.0
2	67	e7.6	e7.0	e7.1	e7.3	e7.6	e10	51	189	14	15	3.7
3	69	e7.6	e7.0	e7.1	e7.3	e7.6	e41	54	181	8.7	8.5	3.8
4	49	e7.6	e7.0	e7.1	e7.3	e7.6	75	60	198	4.8	3.3	3.9
5	39	e7.6	e7.0	e7.1	e7.3	e7.6	84	90	192	5.5	3.3	3.9
6	46	e7.6	e7.0	e7.1	e7.4	e7.6	84	119	161	11	3.4	4.0
7	50	e7.6	e7.0	e7.1	e7.4	e7.6	66	142	165	26	3.3	4.0
8	43	e7.6	e7.0	e7.1	e7.4	e7.6	53	175	159	36	3.4	4.0
9	39	e7.6	e7.0	e7.1	e7.4	e7.6	49	174	162	32	3.5	4.0
10	38	e7.6	e7.0	e7.1	e7.4	e7.6	55	154	155	32	3.5	4.0
11	34	e8.8	e7.0	e7.1	e7.4	e7.6	60	152	131	37	3.5	3.9
12	26	9.4	e7.0	e7.1	e7.4	e7.6	52	165	129	32	3.4	4.0
13	15	9.4	e7.0	e7.2	e7.4	e7.6	53	167	108	29	e5.4	32
14	18	9.4	e7.0	e7.2	e7.4	e7.6	58	182	74	29	5.1	51
15	27	9.4	e7.0	e7.2	e7.4	e7.7	88	218	67	18	5.1	e22
16	37	9.4	e7.0	e7.2	e7.4	e7.7	108	217	67	11	e2.3	4.0
17	40	9.4	e7.0	e7.2	e7.4	e7.7	114	196	49	11	e0.60	4.0
18	44	9.4	e7.0	e7.2	e7.5	e7.7	64	206	39	12	e0.60	4.0
19	35	9.4	e7.0	e7.2	e7.5	e7.7	30	231	37	12	e0.60	6.4
20	27	9.4	e7.0	e7.2	e7.5	e7.7	37	219	39	13	e0.60	8.1
21	33	e8.1	e7.0	e7.2	e7.5	e7.7	40	204	42	14	e0.60	8.1
22	33	e7.0	e7.0	e7.2	e7.5	e7.7	31	204	30	e23	e1.5	8.1
23	32	e7.0	e7.0	e7.2	e7.5	e7.7	35	173	24	20	3.0	11
24	31	e7.0	e7.0	e7.2	e7.5	e7.7	56	143	34	13	3.0	14
25	36	e7.0	e7.0	e7.3	e7.5	e7.7	83	138	34	14	3.1	11
26	46	e7.0	e7.0	e7.3	e7.5	e7.7	99	138	26	14	2.5	7.4
27	44	e7.0	e7.0	e7.3	e7.5	e7.7	94	138	25	14	2.8	5.4
28	46	e7.0	e7.0	e7.3	e7.5	e7.7	70	123	29	14	3.8	7.7
29	48	e7.0	e7.0	e7.3	---	e8.0	49	136	21	26	3.8	13
30	48	e7.0	e7.0	e7.3	---	e9.0	37	163	13	23	3.7	15
31	49	---	e7.0	e7.3	---	e10	---	191	---	14	3.8	---
TOTAL	1242	254.9	217.0	222.7	207.8	241.1	1785	4771	2782	576.0	121.00	279.4
MEAN	40.1	8.50	7.00	7.18	7.42	7.78	59.5	154	92.7	18.6	3.90	9.31
MAX	69	22	7.0	7.3	7.5	10	114	231	202	37	15	51
MIN	15	7.0	7.0	7.1	7.3	7.5	10	48	13	4.8	0.60	3.7
AC-FT	2460	506	430	442	412	478	3540	9460	5520	1140	240	554

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2002, BY WATER YEAR (WY)

	MEAN	MAX	MIN	(WY)
MEAN	41.1	59.4	10.6	11.0
MAX	158	406	50.0	50.0
MIN	1.92	2.00	2.00	3.20
(WY)	1957	1957	1957	1991

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1952 - 2002
ANNUAL TOTAL	32304.8	12699.90	
ANNUAL MEAN	88.5	34.8	92.1
HIGHEST ANNUAL MEAN			137
LOWEST ANNUAL MEAN			34.8
HIGHEST DAILY MEAN	577	231	1150
LOWEST DAILY MEAN	e7.0	0.60	a0.00
ANNUAL SEVEN-DAY MINIMUM	e7.0	0.97	0.16
MAXIMUM PEAK FLOW		241	1160
MAXIMUM PEAK STAGE		2.18	b4.02
ANNUAL RUNOFF (AC-FT)	64080	25190	66710
10 PERCENT EXCEEDS	280	125	303
50 PERCENT EXCEEDS	39	7.7	17
90 PERCENT EXCEEDS	7.0	4.0	6.2

e Estimated.
a Also occurred Oct 17-20, 1955.
b Maximum gage height, 4.29 ft, Jun 15, 1958.

08246500 CONEJOS RIVER NEAR MOGOTE, CO

LOCATION.--Lat 37°03'14", long 106°11'13", in SE¹/₄SE¹/₄ sec.34, T.33 N., R.7 E., Conejos County, Hydrologic Unit 13010005, on left bank 75 ft downstream from bridge on State Highway 17 (revised), 0.4 mi downstream from Fox Creek, 5.3 mi west of Mogote, and 10 mi west of Antonito.

DRAINAGE AREA.--282 mi².

PERIOD OF RECORD.--April 1903 to October 1905, October 1911 to current year. Monthly discharge only for some periods, published in WSP 1312. Records for March 1900 at site 5.5 mi upstream and May 1905 to September 1911 (some missing periods most years) at site 3.2 mi upstream not equivalent to present site due to inflow.

REVISED RECORDS.--WSP 898: 1911(M). WSP 1312: 1903-5, 1913, 1924. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 8,273.69 ft above sea level, Colorado State Highway datum. Apr. 17, 1903 to Oct. 31, 1905, nonrecording gage 400 ft downstream at different datum. Oct. 5, 1911 to early 1915, nonrecording gage, and from early 1915 to Oct. 1, 1988, water-stage recorder at site 100 ft upstream at datum 2.15 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by diversions for irrigation and return flows from irrigated areas. Some regulation by Platoro Reservoir (station 08244500) about 59 mi upstream since Nov. 7, 1951.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage of Oct. 5, 1911, is the greatest since at least 1854, from information obtained from local residents in 1959.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	85	e40	e38	e33	e30	100	145	295	41	27	14
2	90	66	e43	e35	e34	e29	111	146	288	37	25	13
3	103	53	e43	e35	e33	e30	118	144	265	37	29	13
4	101	51	e43	e37	e35	e32	152	160	260	37	34	13
5	83	49	e43	e36	e34	e35	192	192	299	33	27	14
6	74	49	e40	e36	e33	e37	188	243	244	34	24	13
7	80	49	e40	e37	e36	e40	186	297	233	46	26	13
8	83	50	e39	e37	e36	e37	156	326	219	49	23	14
9	82	51	e40	e38	e34	e35	149	336	213	55	21	17
10	83	49	e40	e37	e33	e39	158	303	213	50	18	31
11	75	46	e40	e37	e35	e44	173	280	198	48	16	42
12	73	48	e40	e38	e36	e45	181	298	170	55	15	42
13	69	47	e38	e37	e34	e49	161	305	175	47	13	34
14	63	47	e39	e35	e36	e47	189	332	140	40	13	43
15	60	46	e40	e35	e35	e46	234	367	119	46	13	61
16	63	46	e39	e38	e34	e46	270	409	112	40	13	51
17	70	46	e40	e37	e36	e46	246	372	108	30	12	32
18	73	45	e40	e35	e37	51	222	376	89	26	11	33
19	75	43	e40	e33	e35	53	156	405	78	24	10	51
20	69	36	e40	e34	e35	56	131	409	73	25	11	43
21	63	34	e40	e35	e33	61	119	378	73	35	15	38
22	68	39	e37	e36	e33	63	126	349	78	34	17	35
23	71	48	e36	e35	e35	63	118	319	69	35	14	32
24	65	29	e37	e35	e34	60	134	253	58	41	13	32
25	62	34	e37	e37	e33	55	185	227	61	31	12	34
26	66	27	e38	e38	e31	51	213	225	61	27	12	35
27	73	e32	e38	e37	e32	58	225	223	55	25	11	32
28	73	e26	e38	e38	e31	64	190	219	56	27	11	39
29	78	e34	e38	e36	---	70	179	204	56	26	13	43
30	79	e40	e38	e35	---	78	148	235	51	30	15	51
31	80	---	e38	e34	---	92	---	260	---	38	16	---
TOTAL	2326	1345	1222	1121	956	1542	5110	8737	4409	1149	530	958
MEAN	75.0	44.8	39.4	36.2	34.1	49.7	170	282	147	37.1	17.1	31.9
MAX	103	85	43	38	37	92	270	409	299	55	34	61
MIN	60	26	36	33	31	29	100	144	51	24	10	13
AC-FT	4610	2670	2420	2220	1900	3060	10140	17330	8750	2280	1050	1900

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 2002, BY WATER YEAR (WY)

MEAN	117	93.9	51.4	47.7	51.5	79.7	314	1091	1272	472	207	130
MAX	515	467	116	116	159	153	800	2053	3163	1502	626	484
(WY)	1905	1966	1987	1986	1983	1989	1936	1937	1920	1957	1952	1927
MIN	34.7	29.9	26.9	22.7	30.0	41.0	138	282	118	37.1	17.1	26.8
(WY)	1957	1931	1977	1918	1904	1904	1970	2002	1934	2002	2002	1956

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1903 - 2002
ANNUAL TOTAL	103435	29405	
ANNUAL MEAN	283	80.6	326
HIGHEST ANNUAL MEAN			592
LOWEST ANNUAL MEAN			80.6
HIGHEST DAILY MEAN	1820	May 16	4490
LOWEST DAILY MEAN	e26	Nov 28	a10
ANNUAL SEVEN-DAY MINIMUM	32	Nov 24	12
MAXIMUM PEAK FLOW			b9000
MAXIMUM PEAK STAGE		3.07	c8.50
ANNUAL RUNOFF (AC-FT)	205200	58320	235800
10 PERCENT EXCEEDS	906	220	1020
50 PERCENT EXCEEDS	101	42	95
90 PERCENT EXCEEDS	40	25	42

e Estimated.

a Also occurred Aug 19, 2002.

b Present site and datum, from rating curve extended above 3,100 ft³/s.

c From floodmarks.

08247500 SAN ANTONIO RIVER AT ORTIZ, CO

LOCATION.--Lat 36°59'35", long 106°02'17", in NE¹/₄SE¹/₄ sec.24, T.32 N., R.8 E., Rio Arriba County, New Mexico, Hydrologic Unit 13010005, on left bank 800 ft upstream (south) from Colorado-New Mexico State line (revised), 0.4 mi southeast of Ortiz, and 0.4 mi upstream from Los Pinos River.

DRAINAGE AREA.--110 mi², approximately.

PERIOD OF RECORD.--April 1919 to October 1920, October 1924 to September 1940 (seasonal records only), October 1940 to current year. Monthly discharge only for some periods, published in WSP 1312.

REVISED RECORDS.--WSP 1732: 1951. WSP 1923: 1927 (monthly runoff).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,970 ft above sea level, from topographic map. Prior to Apr. 7, 1926, nonrecording gage at various locations near present site, at different datums. Apr. 7, 1926 to June 24, 1954, water-stage recorder on right bank at site 200 ft downstream at present datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by diversions for irrigation and return flows from irrigated areas. Statistical summary computed for 1940 to current year, subsequent to conversion of station to year-round records.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 5, 1911, is the greatest since at least 1854, from information obtained from local residents in 1959.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.69	2.6	e2.1	e2.0	e1.9	e3.0	18	2.9	0.00	0.00	0.00	0.00
2	1.1	4.0	e2.6	e1.9	e2.1	e2.9	16	2.4	0.00	0.00	0.00	0.00
3	1.1	3.4	e2.6	e2.0	e2.0	e2.9	13	2.2	0.00	0.00	0.00	0.00
4	0.78	2.3	e2.6	e2.1	e2.1	e3.0	11	2.2	0.00	0.00	0.00	0.00
5	0.74	2.3	e2.6	e2.0	e2.0	e3.5	11	2.0	0.00	0.00	0.00	0.00
6	2.0	2.5	e2.2	e2.0	e1.9	e3.7	11	1.7	0.00	0.00	0.00	0.00
7	1.6	2.7	e2.2	e2.1	e2.1	e5.0	9.4	1.5	0.00	0.00	0.00	0.00
8	1.2	2.8	e2.0	e2.2	e2.0	e4.6	9.7	1.3	0.00	0.00	0.00	0.00
9	1.4	2.9	e2.0	e2.3	e2.0	e4.3	9.5	1.1	0.00	0.00	0.00	0.00
10	1.6	3.4	e2.0	e2.1	e2.0	e4.7	9.4	0.93	0.00	0.00	0.00	0.00
11	2.7	3.2	e1.9	e2.0	e2.2	e5.4	9.8	0.82	0.00	0.00	0.00	0.00
12	2.6	2.8	e2.1	e2.1	e2.4	e5.2	9.9	0.66	0.00	0.00	0.00	0.00
13	2.4	2.8	e1.8	e2.0	e2.3	e5.4	9.9	0.57	0.00	0.00	0.00	0.00
14	3.1	2.7	e1.9	e1.9	e2.6	e5.2	9.4	0.48	0.00	0.00	0.00	0.00
15	2.6	2.7	e2.0	e2.0	e2.6	e5.0	9.5	0.41	0.00	0.00	0.00	0.00
16	2.3	2.6	e1.9	e2.1	e2.5	e5.2	9.3	0.45	0.00	0.00	0.00	0.00
17	2.2	2.7	e1.9	e2.0	e2.8	e5.2	9.5	0.53	0.00	0.00	0.00	0.00
18	2.1	2.7	e2.0	e1.9	e3.1	e5.2	7.9	0.42	0.00	0.00	0.00	0.00
19	2.3	2.7	e1.9	e1.8	e3.0	e5.2	6.4	0.18	0.00	0.00	0.00	6.3
20	2.9	2.3	e2.0	e1.9	e3.0	e6.0	5.7	0.09	0.00	0.00	0.00	11
21	2.4	1.9	e2.1	e2.0	e2.8	e7.0	5.2	0.20	0.00	0.00	0.00	6.1
22	2.5	2.0	e1.9	e2.1	e2.8	e8.0	4.1	0.59	0.00	0.00	0.00	3.7
23	2.9	e2.0	e1.9	e2.0	e3.3	e8.0	4.0	0.58	0.00	0.00	0.00	2.6
24	2.9	e1.9	e2.0	e1.9	e3.3	e8.0	3.7	0.73	0.00	0.00	0.00	2.1
25	2.5	e2.0	e2.0	e2.0	e3.2	e8.0	3.6	1.2	0.00	0.00	0.00	1.6
26	2.2	e1.8	e2.0	e2.1	e3.0	e8.0	3.4	0.87	0.00	0.00	0.00	1.4
27	2.3	e1.7	e2.1	e2.1	e3.2	e10	3.7	0.62	0.00	0.00	0.00	1.2
28	2.4	e1.5	e2.0	e2.3	e3.0	e12	4.2	0.35	0.00	0.00	0.00	1.4
29	2.7	e1.8	e2.0	e2.2	---	e14	4.1	0.08	0.00	0.00	0.00	2.0
30	3.2	e2.2	e2.1	e2.1	---	16	3.3	0.00	0.00	0.00	0.00	3.9
31	2.9	---	e2.0	e2.0	---	17	---	0.00	---	0.00	0.00	---
TOTAL	66.31	74.9	64.4	63.2	71.2	206.6	244.6	28.06	0.00	0.00	0.00	43.30
MEAN	2.14	2.50	2.08	2.04	2.54	6.66	8.15	0.91	0.000	0.000	0.000	1.44
MAX	3.2	4.0	2.6	2.3	3.3	17	18	2.9	0.00	0.00	0.00	11
MIN	0.69	1.5	1.8	1.8	1.9	2.9	3.3	0.00	0.00	0.00	0.00	0.00
AC-FT	132	149	128	125	141	410	485	56	0.00	0.00	0.00	86

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2002, BY WATER YEAR (WY)

	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952
MEAN	2.97	3.92	2.71	2.31	3.68	17.4	99.7	144	16.6	1.97	2.85	1.27	
MAX	12.0	13.8	8.12	6.00	13.0	70.6	302	508	108	12.0	17.7	4.42	
(WY)	1987	1987	1967	1965	1962	1997	1962	1941	1957	1957	1957	1986	
MIN	0.000	1.04	0.48	0.000	0.25	2.50	8.15	0.91	0.000	0.000	0.000	0.000	
(WY)	1952	1956	1977	1977	1990	1948	2002	2002	2002	1940	1951	1951	

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1940 - 2002
ANNUAL TOTAL	6756.80	862.57	
ANNUAL MEAN	18.5	2.36	25.2
HIGHEST ANNUAL MEAN			61.8
LOWEST ANNUAL MEAN			2.36
HIGHEST DAILY MEAN	254	May 2	1050
LOWEST DAILY MEAN	0.00	Jun 21	a0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	Jun 21	b0.00
MAXIMUM PEAK FLOW			40
MAXIMUM PEAK STAGE		d1.46	c1380
ANNUAL RUNOFF (AC-FT)	13400	1710	c4.75
10 PERCENT EXCEEDS	71	5.4	18270
50 PERCENT EXCEEDS	2.5	2.0	62
90 PERCENT EXCEEDS	0.00	0.00	3.0
			0.00

e Estimated.

a Also occurred Jun 25 to Aug 7, and Aug 19-23, 1940, and on many days during many years.

b Also occurred for periods during many years.

c From rating curve extended above 1,100 ft³/s. Maximum discharge and gage height for period of record, 1,750 ft³/s, Apr 15, 1937, gage height, 5.38 ft, from rating curve extended above 1,100 ft³/s.

d Maximum gage height, 2.18 ft, Mar 17, backwater from ice.

08248000 LOS PINOS RIVER NEAR ORTIZ, CO

LOCATION.--Lat 36°58'56", long 106°04'23", on line between sec.26, and sec.27, T.32 N., R.8 E., Rio Arriba County, New Mexico, Hydrologic Unit 13010005, on left bank 0.9 mi upstream (south) from Colorado-New Mexico State line (revised), 2.1 mi southwest of Ortiz, and 2.9 mi upstream from mouth.

DRAINAGE AREA.--167 mi².

PERIOD OF RECORD.--January 1915 to December 1920, October 1924 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,040 ft above sea level, from topographic map. Prior to Apr. 15, 1955, at site 350 ft upstream at datum 2.52 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by diversions for irrigation and return flows from irrigated areas.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 5, 1911, is the greatest since at least 1854, from information obtained from local residents in 1959.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	17	e10	e11	e10	e11	54	53	17	4.5	3.7	2.2
2	12	15	e12	e10	e11	e10	68	48	14	4.5	3.7	2.1
3	13	14	e12	e11	e10	e10	84	46	13	4.8	4.2	2.4
4	13	13	e12	e12	e11	e11	86	48	13	5.1	5.2	2.7
5	12	13	e12	e11	e10	e11	96	50	19	5.2	6.1	2.7
6	12	14	e11	e11	e9.0	e12	93	50	18	5.2	5.9	2.6
7	12	14	e11	e12	e10	e13	91	50	15	8.7	7.1	2.9
8	12	14	e10	e12	e10	e12	85	50	12	9.3	7.0	3.2
9	12	15	e11	e13	e9.0	e11	93	44	11	7.8	5.9	3.7
10	16	14	e11	e12	e9.0	e12	107	40	7.6	6.7	5.1	9.4
11	13	13	e10	e11	e10	e13	102	38	7.8	6.5	4.3	14
12	13	13	e11	e12	e10	e13	112	37	7.9	5.8	3.9	12
13	15	13	e10	e11	e10	e13	89	36	6.8	5.8	3.3	10
14	14	13	e11	e10	e11	e12	116	36	6.0	4.5	2.9	9.1
15	14	13	e11	e11	e11	e12	130	36	5.5	4.4	2.7	9.0
16	14	13	e10	e12	e10	e12	115	34	5.6	3.9	2.5	7.5
17	13	13	e11	e11	e11	e12	96	30	5.0	3.1	2.7	6.9
18	13	13	e11	e10	e12	e13	79	29	4.5	3.3	2.3	11
19	13	11	e10	e9.0	e11	e13	75	28	4.3	2.9	2.1	36
20	11	9.4	e11	e10	e11	e13	74	31	3.9	3.3	2.6	25
21	13	e9.2	e11	e11	e11	e14	56	28	4.3	3.9	4.8	15
22	13	e11	e10	e12	e11	e17	59	27	5.0	8.2	5.9	13
23	14	e10	e10	e11	e12	e17	60	23	5.2	5.7	3.9	11
24	13	e10	e10	e10	e12	e17	62	22	5.4	5.9	2.6	10
25	11	e11	e10	e11	e12	e17	66	21	5.5	6.3	2.0	9.9
26	12	e10	e10	e12	e11	19	72	19	5.0	5.0	1.8	9.3
27	11	e9.8	e11	e12	e12	20	69	20	5.2	4.5	1.7	9.4
28	12	e9.6	e11	e13	e11	22	60	20	4.7	4.5	2.0	12
29	15	e9.2	e11	e12	---	25	65	20	4.7	4.0	2.5	18
30	14	e10	e11	e11	---	32	53	18	4.7	3.6	3.5	17
31	14	---	e11	e11	---	40	---	17	---	3.5	2.4	---
TOTAL	402	367.2	334	348.0	298.0	479	2467	1049	246.6	160.4	116.3	299.0
MEAN	13.0	12.2	10.8	11.2	10.6	15.5	82.2	33.8	8.22	5.17	3.75	9.97
MAX	16	17	12	13	12	40	130	53	19	9.3	7.1	36
MIN	11	9.2	10	9.0	9.0	10	53	17	3.9	2.9	1.7	2.1
AC-FT	797	728	662	690	591	950	4890	2080	489	318	231	593

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 2002, BY WATER YEAR (WY)

MEAN	27.2	21.8	16.2	14.5	17.0	34.3	222	605	325	72.2	35.1	24.5
MAX	109	70.1	34.4	26.0	30.0	84.7	610	1341	1022	258	112	101
(WY)	1987	1987	1987	1987	1962	1971	1936	1952	1957	1957	1929	1927
MIN	10.1	11.1	5.00	5.00	7.50	13.9	65.9	33.8	8.22	5.17	3.75	7.53
(WY)	1957	1957	1918	1918	1964	1977	1968	2002	2002	2002	2002	1956

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1915 - 2002

ANNUAL TOTAL	36127.4	6566.5	
ANNUAL MEAN	99.0	18.0	118
HIGHEST ANNUAL MEAN			230
LOWEST ANNUAL MEAN			18.0
HIGHEST DAILY MEAN	1010	May 15	2410
LOWEST DAILY MEAN	e9.2	Nov 21	1.7
ANNUAL SEVEN-DAY MINIMUM	e9.9	Nov 23	2.3
MAXIMUM PEAK FLOW			162
MAXIMUM PEAK STAGE			3.04
ANNUAL RUNOFF (AC-FT)	71660	13020	85750
10 PERCENT EXCEEDS	361	48	376
50 PERCENT EXCEEDS	16	11	25
90 PERCENT EXCEEDS	11	3.9	12

e Estimated.

a Site and datum then in use, from rating curve extended above 1,600 ft³/s.

b Maximum gage height, 6.19 ft, May 22, 1993, present site and datum.

08249000 CONEJOS RIVER NEAR LASAUSES, CO

LOCATION.--Lat 37°18'01", long 105°44'47", in SW¹/₄SW¹/₄ sec.2, and SE¹/₄NE¹/₄ sec.10 (two channels), T.35 N., R.11 E., Conejos County, Hydrologic Unit 13010005, on left bank of main channel 125 ft downstream from bridge on State Highway 158 and on left bank of secondary channel 230 ft upstream from bridge on State Highway 158, 1.0 mi upstream from mouth, 2.1 mi north of Lasausas, and 13 mi southeast of Alamosa.

DRAINAGE AREA.--887 mi².

PERIOD OF RECORD.--March 1921 to current year. Monthly discharge only for some periods, published in WSP 1312. Prior to October 1, 1966, published as "at mouth, near La Sauses" or "near La Sauses." Water-quality data available, April 1993 to September 1995.

REVISED RECORDS.--WSP 1312: 1934(M).

GAGE.--Two water-stage recorders with satellite telemetry. Datum of gage on main (north) channel is 7,495.02 ft above sea level, and on secondary (south) channel is 7,496.89 ft above sea level (levels by U.S. Bureau of Reclamation). Main channel: April 11 to September 30, 1937, at datum 1.00 ft higher. See WSP 1312 and 1732 for history of changes prior to Apr. 11, 1937. South channel: May 4, 1936, to Oct. 13, 1965, at site 280 ft downstream from datum 1.00 ft lower. See WSP 1312 and 1732 for history of changes prior to May 4, 1936.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by diversions for irrigation, ground-water withdrawals, and return flows from irrigated areas. Flows regulated to some extent by Platoro Reservoir (station 08244500) about 83 mi upstream since Nov. 7, 1951.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 5, 1911, is the greatest since at least 1854, from information obtained from local residents in 1959.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.0	6.2	e26	e37	e38	66	e1.1	0.60	0.00	0.00	0.00	0.00
2	0.0	5.7	e31	e35	e39	e64	e0.94	0.57	0.00	0.00	0.00	0.00
3	0.0	3.7	e39	e33	e38	e60	e0.94	0.57	0.00	0.00	0.00	0.00
4	0.0	4.1	e43	e34	e37	e54	1.4	0.58	0.00	0.00	0.00	0.00
5	0.0	4.7	e48	e38	e39	53	1.2	0.52	0.00	0.00	0.00	0.00
6	0.0	8.1	e38	e39	e39	57	0.94	0.50	0.00	0.00	0.00	0.00
7	0.0	10	e33	e39	e40	65	1.3	0.47	0.00	0.00	0.00	0.00
8	0.0	9.3	e26	e40	e42	78	2.0	0.41	0.00	0.00	0.00	0.00
9	0.0	9.9	e23	e41	e43	64	1.7	0.39	0.00	0.00	0.00	0.00
10	0.0	9.9	e23	e45	e42	60	1.6	0.35	0.00	0.00	0.00	0.00
11	0.0	9.6	e24	e40	e43	65	1.8	0.23	0.00	0.00	0.00	0.00
12	0.42	10	e29	e39	e47	71	2.1	0.19	0.00	0.00	0.00	0.00
13	0.23	10	e33	e41	e46	57	2.2	0.21	0.00	0.00	0.00	0.00
14	0.78	10	e32	e37	e52	40	2.2	0.22	0.00	0.00	0.00	0.00
15	0.53	9.9	e34	e37	e51	38	1.9	0.25	0.00	0.00	0.00	0.00
16	0.63	12	e32	e40	e51	33	1.8	0.21	0.00	0.00	0.00	0.00
17	1.1	12	e32	e39	e56	27	1.8	0.21	0.00	0.00	0.00	0.00
18	0.58	13	e33	e38	e61	14	1.8	0.16	0.00	0.00	0.00	0.00
19	1.2	14	e33	e37	e64	11	1.8	0.18	0.00	0.00	0.00	0.00
20	1.4	14	e33	e38	e63	11	1.9	0.25	0.00	0.00	0.00	0.00
21	0.86	16	e35	e38	e69	9.9	1.7	0.29	0.00	0.00	0.00	0.00
22	0.91	17	e35	e36	e62	9.7	1.6	0.25	0.00	0.00	0.00	0.00
23	1.2	19	e33	e35	e68	8.2	1.6	0.20	0.00	0.00	0.00	0.00
24	1.2	20	e32	e35	e72	7.8	1.5	0.14	0.00	0.00	0.00	0.00
25	1.3	e23	e31	e36	e70	7.6	1.3	0.11	0.00	0.00	0.00	0.00
26	0.54	e23	e32	e36	e64	2.4	1.2	0.06	0.00	0.00	0.00	0.00
27	0.25	e23	e32	e37	e64	e0.93	0.82	0.04	0.00	0.00	0.00	0.00
28	0.24	e23	e32	e39	e63	e0.92	0.65	0.02	0.00	0.00	0.00	0.00
29	0.34	e23	e33	e41	---	e0.81	0.59	0.00	0.00	0.00	0.00	0.00
30	0.27	e24	e36	e41	---	e0.76	0.66	0.00	0.00	0.00	0.00	0.00
31	1.4	---	e37	e41	---	e0.82	---	0.00	---	0.00	0.00	---
TOTAL	15.38	397.1	1013	1182	1463	1037.84	44.04	8.18	0.00	0.00	0.00	0.00
MEAN	0.50	13.2	32.7	38.1	52.2	33.5	1.47	0.26	0.000	0.000	0.000	0.000
MAX	1.4	24	48	45	72	78	2.2	0.60	0.00	0.00	0.00	0.00
MIN	0.00	3.7	23	33	37	0.76	0.59	0.00	0.00	0.00	0.00	0.00
AC-FT	31	788	2010	2340	2900	2060	87	16	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2002, BY WATER YEAR (WY)

MEAN	47.1	81.1	58.5	61.4	78.1	103	242	700	552	142	49.7	38.2
MAX	307	424	140	146	186	261	1177	2642	1850	1132	413	425
(WY)	1942	1976	1986	1986	1983	1989	1924	1924	1935	1957	1952	1927
MIN	0.032	8.69	16.7	24.0	29.6	24.9	1.47	0.26	0.000	0.000	0.000	0.000
(WY)	2001	2001	1978	1964	1964	1957	2002	2002	2002	2002	1934	1976

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1921 - 2002

ANNUAL TOTAL	37140.41	5160.54	
ANNUAL MEAN	102	14.1	179
HIGHEST ANNUAL MEAN			451
LOWEST ANNUAL MEAN			14.1
HIGHEST DAILY MEAN	967	May 16	3820
LOWEST DAILY MEAN	0.00	Sep 7	a0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	Sep 7	b0.00
MAXIMUM PEAK FLOW			c3890
ANNUAL RUNOFF (AC-FT)	73670	Not determined	129800
10 PERCENT EXCEEDS	362	42	501
50 PERCENT EXCEEDS	35	0.86	56
90 PERCENT EXCEEDS	0.12	0.00	1.1

e Estimated.
a Also occurred Jun 28 to Jul 1, Jul 3, and Jul 21 to Sep 8, and many days during many years.
b Also occurred during many years.
c Gage height not determined.

08250000 CULEBRA CREEK AT SAN LUIS, CO

LOCATION.--Lat 37°11'01", long 105°25'31", Costilla County, Hydrologic Unit 13010002, on left bank at bridge 1 mi south of San Luis, and 1 mi upstream from the Rito Seco.

DRAINAGE AREA.--220 mi².

PERIOD OF RECORD.--April 1927 to September 1982. October 1998 to current year. Monthly discharge only for some periods, published in WSP 1312. Records for January 1910 to December 1911, published as Culebra River at San Luis in WSP 288 and 308, have been found to be unreliable and should not be used. October 1982 to September 1998, in reports of State Engineer.

REVISED RECORDS.--WSP 1312: 1940. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Non-standard Parshall flume since May 23, 1931. Elevation of gage is 8,000 ft above sea level, from topographic map. Prior to May 23, 1931, at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoir, diversions for irrigation, ground-water withdrawals, and return flows from irrigated areas. Flow regulated to large extent by Sanchez Reservoir on Ventero Creek, capacity 103,000 acre-ft.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	20	18	17	18	20	18	13	72	70	66	e59
2	19	20	19	18	20	19	18	11	74	70	66	e60
3	18	21	21	16	e19	17	17	11	74	75	66	e60
4	18	20	21	17	e20	18	16	27	76	84	66	e60
5	19	21	20	17	e20	19	17	48	89	84	67	e59
6	19	22	19	18	e19	20	17	50	79	89	67	e53
7	19	23	18	19	21	23	17	53	76	97	67	e45
8	19	23	17	19	21	22	17	56	75	97	66	e45
9	19	22	16	20	20	20	17	57	74	80	66	e45
10	19	21	16	21	20	22	17	57	88	68	66	e45
11	20	21	17	19	21	26	18	55	110	76	65	e45
12	23	21	17	21	20	28	19	37	121	94	65	45
13	25	21	17	20	19	33	20	15	129	94	65	36
14	23	21	17	19	20	29	17	16	138	94	73	22
15	22	21	18	20	20	23	15	35	128	93	83	21
16	20	21	17	20	20	21	15	60	71	80	83	21
17	20	21	18	19	21	20	14	69	68	68	81	21
18	20	20	18	19	21	23	13	76	66	88	81	24
19	20	20	17	18	22	21	13	76	67	88	81	25
20	20	20	17	17	22	21	13	78	67	89	81	22
21	20	20	17	19	23	22	13	77	53	89	81	21
22	21	23	17	20	23	23	13	41	40	89	80	20
23	21	27	17	19	23	22	12	48	37	91	73	21
24	21	22	16	18	26	19	12	82	37	90	60	21
25	20	22	15	19	25	19	12	81	36	49	60	20
26	20	22	15	19	21	19	14	83	45	50	65	19
27	21	20	15	19	22	19	14	84	55	53	82	19
28	21	17	15	20	19	19	13	85	60	53	72	29
29	20	17	15	20	---	19	13	79	71	53	e85	54
30	20	18	17	21	---	19	13	74	70	53	e73	37
31	20	---	17	21	---	18	---	73	---	59	e59	---
TOTAL	657	628	534	589	586	663	457	1707	2246	2407	2211	1074
MEAN	21.2	20.9	17.2	19.0	20.9	21.4	15.2	55.1	74.9	77.6	71.3	35.8
MAX	50	27	21	21	26	33	20	85	138	97	85	60
MIN	18	17	15	16	18	17	12	11	36	49	59	19
AC-FT	1300	1250	1060	1170	1160	1320	906	3390	4450	4770	4390	2130

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2002, BY WATER YEAR (WY)

MEAN	22.4	21.5	18.6	18.2	18.8	19.6	18.7	53.6	134	109	81.1	32.5
MAX	36.7	51.4	39.1	32.2	32.6	36.2	48.3	137	303	231	184	69.2
(WY)	1942	1958	1958	1942	1942	1942	1942	1930	1942	1942	1949	1945
MIN	6.00	6.63	6.64	7.03	6.70	7.42	7.79	11.7	40.1	30.4	27.3	9.49
(WY)	1951	1951	1952	1951	1951	1951	1951	1955	1963	1977	1976	1972

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR (a) WATER YEARS 1927 - 2002

ANNUAL TOTAL	14811	13759		
ANNUAL MEAN	40.6	37.7	45.6	
HIGHEST ANNUAL MEAN			92.7	1942
LOWEST ANNUAL MEAN			18.2	1951
HIGHEST DAILY MEAN	144	Jun 29	479	Jun 1 1942
LOWEST DAILY MEAN	14	Jan 15	11	May 2
ANNUAL SEVEN-DAY MINIMUM	14	Jan 20	13	Apr 19
MAXIMUM PEAK FLOW			148	Jun 14
MAXIMUM PEAK STAGE			1.75	Jun 14
ANNUAL RUNOFF (AC-FT)	29380	27290	33070	
10 PERCENT EXCEEDS	98	81	115	
50 PERCENT EXCEEDS	21	21	25	
90 PERCENT EXCEEDS	16	17	11	

e Estimated.

a Water years 1927-1982 and 1999 to current year.

b From rating curve extended above 300 ft³/s.

08251500 RIO GRANDE NEAR LOBATOS, CO

LOCATION.--Lat 37°04'43", long 105°45'23", in NE¹/₄NW¹/₄ sec.27, T.33 N., R.11 E., Conejos County, Hydrologic Unit 13010002, on right bank at highway bridge, 5.7 mi north of Colorado-New Mexico State line, 8 mi downstream from Culebra Creek, 11 mi east of Lobatos, and 14 mi east of Antonito.

DRAINAGE AREA.--7,700 mi², approximately, includes 2,940 mi² in closed basin in northern part of San Luis Valley, CO.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1899 to current year. Monthly discharge only for some periods, published in WSP 1312. Published as "at Cenicero" 1899-1901, and as "near Cenicero" 1902-4. Statistical summary computed for 1931 to current year.

REVISED RECORDS.-- WSP 210: Drainage area. WSP 1312: 1919 (monthly runoff). WDR CO-78-1: 1976.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 7,427.63 ft above sea level. Prior to Nov. 8, 1910, nonrecording gages at same site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, and return flows from irrigated areas.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1828, that of June 8, 1905.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	55	e200	e255	e240	e290	297	31	23	17	4.3	8.5
2	45	58	e240	e250	e240	e200	297	37	24	17	4.4	7.6
3	46	60	e270	e240	e235	e280	198	28	22	14	4.4	7.7
4	46	57	e290	e240	e230	e290	134	38	22	12	7.2	9.3
5	47	60	e260	e235	e230	e280	105	42	23	15	7.5	9.7
6	48	67	e280	e240	e225	e270	90	40	23	16	6.2	9.3
7	53	69	e270	e250	e220	e290	72	39	23	15	9.4	9.0
8	55	69	e220	e255	e225	e300	72	38	25	14	9.7	8.6
9	58	65	e220	e255	e220	e330	71	38	25	12	7.7	8.8
10	61	65	e220	e260	e220	e350	63	39	23	10	6.4	14
11	55	65	e230	e250	e230	e360	57	35	22	11	7.7	13
12	61	65	e240	e260	e230	e380	55	28	22	10	7.3	13
13	66	67	e220	e235	e235	372	53	28	22	8.0	7.1	13
14	62	92	e220	e245	e240	391	57	31	23	8.1	7.1	15
15	58	163	e220	e255	e245	364	58	36	24	9.3	7.3	12
16	53	209	e220	e260	e250	352	59	28	22	9.3	7.1	9.3
17	54	238	e230	e250	e260	347	57	31	22	9.6	5.9	9.0
18	55	250	e230	e240	e265	314	55	31	22	8.8	7.7	13
19	57	250	e230	e235	e270	301	49	28	21	7.9	7.7	18
20	53	258	e240	e235	e280	293	54	29	21	8.2	8.9	17
21	53	259	e230	e240	e290	294	57	29	22	8.3	9.1	16
22	54	254	e230	e240	e290	292	56	30	22	8.2	9.7	14
23	64	248	e230	e235	e295	310	51	26	22	8.4	9.0	14
24	64	e220	e220	e235	e300	316	50	24	20	11	8.1	14
25	60	e220	e220	e235	e295	312	45	25	19	8.8	7.4	13
26	60	e210	e230	e240	e265	294	48	25	22	6.9	6.9	14
27	60	e180	e220	e240	e295	293	49	25	20	6.3	6.8	15
28	58	e160	e220	e240	e300	263	37	25	19	6.0	7.2	18
29	55	e160	e240	e245	---	262	33	28	20	5.4	9.7	24
30	56	e170	e250	e245	---	272	35	28	19	5.0	13	25
31	58	---	e250	e235	---	287	---	26	---	4.7	12	---
TOTAL	1718	4363	7290	7575	7120	9549	2414	966	659	311.2	239.9	391.8
MEAN	55.4	145	235	244	254	308	80.5	31.2	22.0	10.0	7.74	13.1
MAX	66	259	290	260	300	391	297	42	25	17	13	25
MIN	43	55	200	235	220	200	33	24	19	4.7	4.3	7.6
AC-FT	3410	8650	14460	15030	14120	18940	4790	1920	1310	617	476	777

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2002, BY WATER YEAR (WY)

MEAN	187	313	284	265	316	417	511	1096	1214	432	169	135
MAX	1401	1199	763	521	595	884	2326	4958	4470	2754	1281	938
(WY)	1942	1942	1942	1986	1986	1987	1985	1987	1941	1995	1999	1999
MIN	12.9	59.6	61.7	75.7	102	66.0	32.3	31.2	19.8	1.28	3.21	1.91
(WY)	1957	1955	1964	1957	1957	1957	1935	2002	1977	1951	1956	1956

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1931 - 2002
ANNUAL TOTAL	146361	42596.9	
ANNUAL MEAN	401	117	a445
HIGHEST ANNUAL MEAN			1264
LOWEST ANNUAL MEAN			70.9
HIGHEST DAILY MEAN	2140	391	b9110
LOWEST DAILY MEAN	29	4.3	c0.00
ANNUAL SEVEN-DAY MINIMUM	32	4.9	0.00
MAXIMUM PEAK FLOW		440	d11600
MAXIMUM PEAK STAGE		f1.72	8.76
ANNUAL RUNOFF (AC-FT)	290300	84490	322100
10 PERCENT EXCEEDS	1100	280	961
50 PERCENT EXCEEDS	229	55	242
90 PERCENT EXCEEDS	55	8.4	39

e Estimated.

a Average discharge for 31 years (water years 1900-30), 846 ft³/s; 612,900 acre-ft/yr, includes period of extensive development for irrigation.

b Maximum daily discharge for period of record, 13,100 ft³/s, Jun 8, 1905.

c No flow at times in 1950-51, 1956.

d Maximum discharge and stage for period of record, 13,200 ft³/s, Jun 8, 1905, gage height, 9.1 ft, from rating curve extended above 8,000 ft³/s.

f Maximum gage height, 3.01 ft, Dec 8, backwater from ice.

RIO GRANDE BASIN

08251500 RIO GRANDE NEAR LOBATOS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1969 to current year. September 1969 to September 1993 under the National Stream-Quality Accounting Network (NASQAN). April 1993 to September 1996 under the Rio Grande National Water-Quality Assessment Program.

PERIOD OF DAILY RECORD.--
 SPECIFIC CONDUCTANCE: October 1975 to September 1981.
 WATER TEMPERATURE: October 1975 to September 1981.

REMARKS.--Additional water-quality data were collected as part of a water-quality assessment of drought conditions and are published in the "Drought Synoptic Sampling" section of this report.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	HARDNESS TOTAL (MG/L) (00900)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNESIUM, DIS-SOLVED (MG/L) (00925)	POTASSIUM, DIS-SOLVED (MG/L) (00935)	SODIUM, DIS-SOLVED (MG/L) (00930)	CHLORIDE, DIS-SOLVED (MG/L) (00940)	FLUORIDE, DIS-SOLVED (MG/L) (00950)
OCT 17...	1235	56	10.0	8.7	455	9.5	130	36.9	8.66	6.82	48.2	12.7	.7
MAR 14...	0915	385	10.4	8.1	205	2.0	70	21.5	3.96	3.15	15.1	5.07	.3
MAY 15...	1000	34	8.6	8.4	496	11.0	130	36.9	8.59	6.59	58.0	13.7	.73
JUN 04...	1015	22	8.3	8.5	517	14.0	120	34.9	8.54	6.86	64.0	16.3	.99
JUL 11...	1130	12	9.5	8.6	461	21.5	84	20.8	7.78	7.82	64.0	15.4	.86
AUG 15...	1030	7.0	7.6	9.0	450	18.5	58	12.1	6.66	8.31	69.5	17.6	1.08
Date	SILICA, DIS-SOLVED (MG/L) (00955)	SULFATE DIS-SOLVED (MG/L) (00945)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (00300)	NITROGEN, AMMONIA DIS-SOLVED (MG/L) (00608)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L) (00623)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L) (00625)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)	NITROGEN, NITRITE DIS-SOLVED (MG/L) (00613)	PHOSPHORUS, DIS-SOLVED (MG/L) (00666)	ORTHO-PHOSPHATE, DIS-SOLVED (MG/L) (00671)	PHOSPHORUS, TOTAL (MG/L) (00665)	ALUMINUM, DIS-SOLVED (UG/L) (01106)	ANTIMONY, DIS-SOLVED (UG/L) (01095)
OCT 17...	27.4	59.5	290	<.04	.27	.34	<.05	<.008	.035	.02	.052	15	.13
MAR 14...	27.8	23.7	156	<.04	.11	.50	.19	<.008	.041	.03	.197	--	--
MAY 15...	25.4	65.0	333	<.04	.32	.46	<.05	<.008	.028	.02	.070	13	.16
JUN 04...	23.3	65.7	342	<.04	.31	.51	<.05	<.008	.024	E.01	.064	16	.10
JUL 11...	17.8	51.4	284	<.04	.38	.64	<.05	<.008	.011	<.02	.069	6	.17
AUG 15...	8.79	53.0	263	<.04	.43	.68	<.05	<.008	.013	<.02	.061	--	--
Date	ARSENIC, DIS-SOLVED (UG/L) (01000)	BARIUM, DIS-SOLVED (UG/L) (01005)	BERYLLIUM, DIS-SOLVED (UG/L) (01010)	CADMIUM, DIS-SOLVED (UG/L) (01025)	CHROMIUM, DIS-SOLVED (UG/L) (01030)	COBALT, DIS-SOLVED (UG/L) (01035)	COPPER, DIS-SOLVED (UG/L) (01040)	IRON, DIS-SOLVED (UG/L) (01046)	LEAD, DIS-SOLVED (UG/L) (01049)	MANGANESE, DIS-SOLVED (UG/L) (01056)	MOLYBDENUM, DIS-SOLVED (UG/L) (01060)	NICKEL, DIS-SOLVED (UG/L) (01065)	SELENIUM, DIS-SOLVED (UG/L) (01145)
OCT 17...	3	35	<.06	<.04	<.8	.20	--	31	<.08	11.1	3.7	.43	<2
MAR 14...	--	--	--	--	--	--	--	85	--	14.5	--	--	--
MAY 15...	4	38	<.06	E.02	<.8	.29	6.8	43	.14	35.8	6.3	1.04	<2
JUN 04...	4	38	<.06	E.03	<.8	.28	--	33	.13	36.5	7.7	1.22	<2
JUL 11...	5	34	<.06	E.03	<.8	.32	--	E7	.13	20.3	8.1	.81	<2
AUG 15...	--	--	--	--	--	--	--	14	--	20.3	--	--	--

E Estimated laboratory analysis value.

08251500 RIO GRANDE NEAR LOBATOS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
OCT 17...	<1	1	1.98
MAR 14...	--	--	--
MAY 15...	<1	1	2.81
JUN 04...	<1	1	2.72
JUL 11...	<1	1	1.96
AUG 15...	--	--	--

TRANSMOUNTAIN DIVERSIONS FROM COLORADO RIVER BASIN IN COLORADO THAT ARE NO LONGER PUBLISHED

Following is a list of Transmountain Diversions no longer being published in this report. Diversions, in acre-feet, for these sites are available from the State of Colorado, Division of Water Resources.

TO PLATTE RIVER BASIN

09010000 Grand River Ditch
 09012000 Eureka Ditch
 09013000 Alva B. Adams Tunnel
 09021500 Berthoud Pass Ditch
 09022500 Moffat Water Tunnel
 09046000 Boreas Pass Ditch
 09047300 Vidler Tunnel
 09050590 Harold D. Roberts Tunnel

TO ARKANSAS RIVER BASIN

09042000 Hoosier Pass Tunnel
 09061500 Columbine Ditch
 09062500 Wurtz Ditch
 09063700 Homestake Tunnel
 09073000 Twin Lakes Tunnel
 09077160 Charles H. Boustead Tunnel
 09077500 Busk-Ivanhoe Tunnel
 09115000 Larkspur Ditch

TO RIO GRANDE RIVER BASIN

09118200 Tarbell Ditch
 09121000 Tabor Ditch
 09341000 Treasure Pass Ditch
 09347000 Don LaFont Ditches 1 & 2
 09348000 Williams Creek Squaw Pass
 Ditch
 09351000 Pine River-Weminuche Pass
 Ditch
 09351500 Weminuche Pass

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or flood-flow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at crest-stage partial-record stations are presented in the following table. Discharge measurements made at low-flow partial-record sites and at miscellaneous sites and for special studies are given in separate tables.

CREST-STAGE PARTIAL-RECORD STATIONS

The following table contains annual maximum discharge for crest-stage stations. A crest-stage gage is a device that will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS

Station name and number	Location and drainage area	Period of record	Water year 2002 maximum			Period of record maximum			
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)	
PLATTE RIVER BASIN									
Lee Gulch at Littleton, CO (06709740)	Lat 39°35'47", long 105°00'57", in SW ¹ / ₄ SW ¹ / ₄ sec.21, T.5 S., R.68W., Arapahoe County, on right bank 30 ft upstream from culvert under Prince St. and 0.6 mi upstream from mouth in Littleton. Drainage area not determined.	1980-2002	7-06-02	10.31	55	a1983	16.00	444	
Dutch Creek at Platte Canyon Drive, near Littleton, CO (06709910)	Lat 39°36'01", long 105°02'28", in NW ¹ / ₄ SE ¹ / ₄ sec.19, T.5 S., R.69 W., Arapahoe County, on left bank 150 ft downstream from bridge on Platte Canyon Road. Drainage area not determined.	1985-2002	5-24-02 7-08-01	10.85 11.02	36 185	6-01-91	11.51	1,090	
Weaver Creek near Lakewood, CO (06711305)	Lat 39°38'13", long 105°07'47", in NE ¹ / ₄ NE ¹ / ₄ sec.8, T.5 S., R.69 W., Jefferson County, 500 ft upstream from Simms St., and 700 ft south of West Quincy Ave. Drainage area not determined.	1982-2002	9-12-02	10.62	30	a1985	13.93	1,010	
Little Dry Creek near Arapahoe Road, CO (06711515)	Lat 39°35'38", long 104°54'23", in NE ¹ / ₄ NE ¹ / ₄ sec.29, T.5 S., R.67 W., Arapahoe County, on right bank, 800 ft downstream from Quebec St. (formerly published as Inflow to Holly Reservoir, 1985-86). Drainage area not determined.	1985-2002	8-29-02	8.53	181	a1985	10.52	800	
Willow Creek at Dry Creek Road, near Englewood, CO (06711535)	Lat 39°34'49", long 104°54'42", in NW ¹ / ₄ NE ¹ / ₄ sec.32, T.5 S., R.67 W., Arapahoe County, on left bank, upstream wingwall of bridge on Dry Creek Road over Willow Creek. Drainage area not determined.	1985-2002	7-06-02	10.43	386	a1985	14.28	3,470	
Little Dry Creek above Englewood, CO (06711555)	Lat 39°38'57", long 104°58'42", in SE ¹ / ₄ NE ¹ / ₄ sec.3, T.5 S., R.68 W., Arapahoe County, on right bank 250 ft downstream from bridge on Clarkson St., and 800 ft south of Hampton Ave., in Cherry Hills Village. Drainage area not determined. Prior to April 2, 1992, gage was located at a site 300 ft upstream from the present location.	1982-2002	7-06-02	6.52	303	a1983	15.64	1,060	

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station name and number	Location and drainage area	Period of record	Water year 2002 maximum			Period of record maximum			
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)	
PLATTE RIVER BASIN--Continued									
Harvard Gulch at Colorado Blvd., at Denver, CO (06711570)	Lat 39°40'08", long 104°56'32", in SE ¹ / ₄ SE ¹ / ₄ sec.25, T.4 S., R.67 W., Denver County, on left bank, 100 ft upstream from S. Jackson St., and 400 ft north of E. Yale Ave. Drainage area not determined.	1979-2002	9-12-02	13.66	870	7-8-01	13.98	1,100	
Harvard Gulch below University Blvd. at Denver, CO (06711572)	Lat 39°40'10", long 104°57'33", in SE ¹ / ₄ SE ¹ / ₄ sec.26, T.4 S., R.68 W., Denver County, 200 ft, downstream from University Blvd., and 600 ft north of East Yale Ave., in Denver. REVISED RECORDS.--WDR-CO-92-1: 1989-91. Drainage area not determined.	1979-2002	9-12-02	14.36	879	7-8-01	15.50	1,600	
Harvard Gulch at Harvard Park at Denver, CO (06711575)	Lat 39°40'21", long 104°58'35", in NW ¹ / ₄ SW ¹ / ₄ sec.26, T.4 S., R.68 W., Denver County, on left bank, 200 ft north of E. Harvard Ave. and 300 ft west of S. Ogden St., directly north of Porter Hospital. Drainage area not determined.	1979-2002	9-12-02	14.41	434	7-12-96	16.25	1,100	
Sanderson Gulch tributary at Lakewood, CO (06711600)	Lat 39°41'19", long 105°04'54", in NE ¹ / ₄ NW ¹ / ₄ sec.23, T.4 S., R.68 W., Jefferson County, 300 ft upstream from S. Wadsworth Blvd., 300 ft south of W. Florida Ave. in Lakewood. Drainage area is 0.38 mi ² .	1969-2002	9-12-02	12.10	44	6-06-77	4.91	422	
Weir Gulch upstream from 1st Avenue, at Denver, CO (06711618)	Lat 39°43'03", long 105°02'30", in NW ¹ / ₄ SE ¹ / ₄ sec.7, T.4 S., R.68 W., Denver County, 250 ft upstream from 1st Ave., in Denver. Drainage area not determined.	1985-2002	9-12-02	10.22	141	8-01-91	11.91	523	
Dry Gulch at Denver, CO (06711770)	Lat 39°44'03", long 105°02'20", in SW ¹ / ₄ NE ¹ / ₄ sec.6, T.4 S., R.68 W., Denver County, 800 ft upstream from confluence with Lakewood Gulch, north of West 10th Ave., at Perry St., in Denver. Drainage area not determined.	1980-2002	6-4-02	11.51	118	a1981	16.00	445	
Lakewood Gulch at Denver, CO (06711780)	Lat 39°44'06", long 105°01'54", in SW ¹ / ₄ NW ¹ / ₄ sec.5, T.4 S., R.68 W., Denver County, 2,000 ft downstream from confluence with Dry Gulch, near intersection of Knox Ct., and West 12th Ave., in Denver. Drainage area not determined.	1980-2002	9-12-02 7-8-01	14.08 14.64	517 702	8-19-98	14.80	1,180	
Sloans Lake, south Tributary at Denver, CO (06711820)	Lat 39°44'44", long 105°03'28", in NW ¹ / ₄ SE ¹ / ₄ sec.36, T.3 S., R.69 W., Jefferson County, 50 ft south of 18th Ave., at Depew St. REVISED RECORDS.--WDR CO-90-1: 1985-89. Drainage area not determined.	1985-2002	9-12-02	4.51	47	6-01-91	14.00	451	
Westerly Creek at Aurora, CO (06714260)	Lat 39°44'43", long 104°52'48", in NW ¹ / ₄ SW ¹ / ₄ sec.34, T.3 S., R.67 W., Adams County, 50 ft upstream from footbridge, 800 ft upstream from Montview Blvd., and 100 ft east of Boston St., in Aurora. REVISED RECORDS.--WDR CO-90-1: 1983-85, 1987-88. Drainage area not determined.	1982-2002	5-24-02	12.11	392	a1983	14.45	1,530	

MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station name and number	Location and drainage area	Period of record	Water year 2002 maximum		Period of record maximum				
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)	
PLATTE RIVER BASIN--Continued									
Lena Gulch at Lakewood, CO (06719560)	Lat 39°44'27", long 105°08'49", in SE ¹ / ₄ SE ¹ / ₄ sec.31, T.3 S., R.69 W., Jefferson County, on right bank 200 ft north of West 15th Drive at Arbutus. Prior to July 6, 1988, at site approx. 500 ft downstream (formerly published as Lena Gulch at Alkire at Golden, CO, 1986-87). Drainage area is approximately 9.0 mi ² .	1974-79 1986-2002	5-24-02	10.91	62	7-20-75	14.41	641	
Little Dry Creek at Westminster, CO (06719840)	Lat 39°49'34", long 105°02'25", in NW ¹ / ₄ NE ¹ / ₄ sec.6, T.3 S., R.68 W., Adams County, 400 ft downstream from 72nd Ave. in Westminster. REVISED RECORDS.--WDR CO-89-1: 1986. Drainage area not determined.	1982-2002	7-6-02	101.55	191	6-01-91	13.09	1,280	
ARKANSAS RIVER BASIN									
North Rockrimmon Creek above Delmonico Dr. at Colorado Springs, CO (07104050)	(REVISED) Lat 38°54'56", long 104°49'35", in SW ¹ / ₄ NE ¹ / ₄ sec.18, T.13 S., R.66 W., El Paso County, on both banks, 300 ft upstream from Delmonico Drive at Colorado Springs, 0.2 mi west of Interstate 25, 0.3 mi upstream from mouth, and 2.0 mi downstream from Woodmen Road. Drainage area 1.82 mi ² .	1998-2002	7-5-02	5.42	508	7-24-01	6.46	745	
Big Arroyo near Thatcher, CO (07120620)	Lat 37°33'17", long 104°01'16", in NW ¹ / ₄ NW ¹ / ₄ sec.4, T.29 S., R.59 W., Las Animas County, On Pinon Canyon Maneuver site (revised), on left bank 30 ft upstream from bridge on Pipeline Road, 5.3 mi upstream from mouth, and 4.8 mi east of Thatcher. REVISED RECORDS.--WDR CO-97-1:1987(M). Drainage area is 15.5 mi ² .	1983-90b 1991-2002	7-22-02	3.20	33	8-11-97	5.78	1,780	
Big Sandy Creek above Amity Canal Diversion, near Kornman, CO (07134000)	(REVISED) Lat 38°12'52", long 102°28'47", in NE ¹ / ₄ NW ¹ / ₄ sec.21, T.21 S., R.45 W., Prowers County, on left bank 106 ft upstream from Amity Canal Diversion 7.0 mi upstream from mouth, and 9.0 mi northeast of Kornman. Drainage area is 3,136 mi ² , of which about 585 mi ² is probably noncontributing.	1941-46b 1996-2002	no peaks during year			5-04-99	14.00	3,580	
Two Butte Creek near Holly, CO (07135000)	Lat 38°01'40", long 102°08'19", in SE ¹ / ₄ SE ¹ / ₄ sec.21,T.23 S., R.42 W., Prowers County, on left bank 200 ft downstream from road DD, approximately 1 mi upstream from mouth, and 2.9 mi southwest of Holly. Drainage area is 817 mi ² .	1942-46bc 1995-99b 2000-2002	no peaks during year			5-02-44	4.77c	1,800	

a-Month or day of occurrence is unknown or not exact.

b-Previously operated as a continuous-record gaging station.

c-At different datum.

e-Estimated.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

SPECIAL STUDY AND MISCELLANEOUS SITES

Discharge measurements in the following table were made at a miscellaneous site. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE MEASUREMENTS MADE AT SPECIAL STUDY AND MISCELLANEOUS SITES DURING WATER YEAR 2002.

ARKANSAS RIVER BASIN

Station no	Station name	Location and drainage area	Date	Discharge (ft ³ /s)
07079195	East Fork Arkansas River at Highway 91 near Leadville, CO	Lat 39°17'09", long 106°16'45", in NW ¹ / ₄ NE ¹ / ₄ , sec.12, T.9 S., R.80 W. Lake County, Hydrologic Unit 11020001, on right bank, 20 ft. upstream of State Highway 91, 1.6 mi north of Leadville. Drainage area is 35.0 mi ² .	10-03-01	15
			11-07-01	10
			12-06-01	11
			1-04-02	8.7
			2-07-02	5.9
			3-06-02	5.5
			4-03-02	7.2
			5-01-02	23
			6-05-02	46
			7-03-02	15
			8-07-02	14
			9-04-02	6.4

PRECIPITATION DATA AT SITES ON FORT CARSON MILITARY RESERVATION

A network of meteorological stations is operated on the Fort Carson Military Reservation to provide precipitation data for land-condition trend analysis, long-term climatic analysis, storm-runoff modeling, and operations management during military training exercises. Other meteorological data are available upon request.

382731104473701 MPRC METEOROLOGICAL STATION AT FORT CARSON, CO

LOCATION.--Lat 38°27'31", long 104°47'37", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.29, T.18 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, 0.1 mi northeast of Military Route 1, 2.1 mi northeast of Teller Reservoir, and 16 mi southwest of Fountain.

PRECIPITATION RECORDS

PERIOD OF RECORD.--May 1999 to current year.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 5,800 ft above sea level, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 1.17 inches, July 17, 2000.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 0.69 inch, July 5.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.10	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.00
5	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00
7	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.07
10	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.23
11	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.04
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.09
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.02	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
18	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.12	0.00	0.00
26	0.00	0.00	0.00	0.00	0.01	0.04	0.01	0.00	0.00	0.01	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.02	0.01
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.03	0.00
30	0.00	0.00	0.01	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.06	0.12	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.02	0.55	0.09	0.30	0.03	0.07	0.12	0.50	0.54	1.26	0.49	0.55
MAX	0.02	0.29	0.06	0.12	0.02	0.04	0.08	0.27	0.33	0.69	0.44	0.23

WTR YR 2002 TOTAL 4.52 MAX 0.69

ARKANSAS RIVER BASIN

PRECIPITATION DATA AT SITES ON FORT CARSON MILITARY RESERVATION--Continued

384339104461201 RANGE ONE METEOROLOGICAL STATION AT FORT CARSON, CO

LOCATION.--Lat 38°43'39", long 104°46'12", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.22, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on Fort Carson Military Reservation, 0.1 mi southeast of intersection of Military Route 5 and Specker Ave., 1.5 mi southwest of Interstate 25, and 7.9 mi south of Colorado Springs.

PRECIPITATION RECORDS

PERIOD OF RECORD.--March 1999 to current year.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 5,770 ft (revised) above sea level, from topographic map.

REMARKS.--Records good except for November through February, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 1.51 inches, May 30, 2001.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 0.81 inch, Sept. 12.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.02	0.00	0.05	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.02	0.00
7	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.05
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.21
10	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.27
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.16	0.00	0.00	0.03
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.81
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.07
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.08	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.29	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.31	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.01	0.04	0.00	0.00	0.02	0.00	0.04
27	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.02	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.06	0.08	0.02	0.11	0.00	0.01	0.07	0.91	0.28	1.19	0.71	1.50
MAX	0.06	0.04	0.02	0.06	0.00	0.01	0.04	0.27	0.16	0.68	0.31	0.81

WTR YR 2002 TOTAL 4.94 MAX 0.81

PRECIPITATION DATA AT SITES ON FORT CARSON MILITARY RESERVATION--Continued

384053104492001 ROD AND GUN METEOROLOGICAL STATION AT FORT CARSON, CO

LOCATION.--Lat 38°40'53", long 104°49'20", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.6, T.16 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on Fort Carson Military Reservation, 0.4 mi north of Military Route 4, 1.2 mi east of State Highway 115, and 9.1 mi south of Colorado Springs.

PRECIPITATION RECORDS

PERIOD OF RECORD.--May 1999 to current year.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 6,120 ft above sea level, from topographic map.

REMARKS.--Records good except for Mar. 6 to June 11, which are fair, and November through February, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 2.97 inches, Aug. 4, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 0.48 inch, July 5.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.07	0.00	0.20	0.00	0.00
3	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
7	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
9	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.04	0.00	0.16
10	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.27
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.18
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.02	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.01	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.13	0.00
22	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
23	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.03	0.02	0.00	0.00	0.12	0.00	0.02
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.09	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.01	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.01	0.01	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.07	0.18	0.03	0.12	0.01	0.03	0.05	0.69	0.12	1.16	0.24	0.74
MAX	0.07	0.07	0.02	0.08	0.01	0.03	0.03	0.26	0.07	0.48	0.13	0.27

WTR YR 2002 TOTAL 3.44 MAX 0.48

ARKANSAS RIVER BASIN

PRECIPITATION DATA AT SITES ON FORT CARSON MILITARY RESERVATION--Continued

383159104540701 SULLIVAN PARK METEOROLOGICAL STATION AT FORT CARSON, CO

LOCATION.--Lat 38°31'59", long 104°54'07", in NW¹/₄NW¹/₄ sec.33, T.17 S., R.67 W., El Paso County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, 0.4 mi east of Military Route 11, 1.0 mi north of Military Route 8, 1.1 mi northeast of Camp Red Devil, and 9 mi northeast of Penrose.

PRECIPITATION RECORDS

PERIOD OF RECORD.--May 1999 to current year.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 6,010 ft above sea level, from topographic map.

REMARKS.- Records good except for November through February, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 2.92 inches, Aug. 4, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 0.91 inch, July 5.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.10	0.00	0.06	0.00	0.03	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.01
5	0.00	0.00	0.00	0.01	0.06	0.00	0.00	0.00	0.00	0.91	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00
7	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.08
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29
11	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.01
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.40
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.01	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
18	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.00
23	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.0	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01
27	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.05	0.00	0.00	0.04	0.00
28	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.41	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.03	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.07	0.14	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.01	0.72	0.07	0.25	0.09	0.09	0.11	0.42	0.04	1.45	0.57	0.91
MAX	0.01	0.44	0.07	0.14	0.06	0.06	0.05	0.21	0.02	0.91	0.41	0.40

WTR YR 2002 TOTAL 4.73 MAX 0.91

PRECIPITATION DATA AT SITES ON FORT CARSON MILITARY RESERVATION--Continued

383109104431301 YOUNG HOLLOW METEOROLOGICAL STATION AT FORT CARSON, CO

LOCATION.--Lat 38°31'09", long 104°43'13", in NE¹/₄NE¹/₄ sec.1, T.18 S., R.66 W., Pueblo County, Hydrologic Unit 11020003, on Fort Carson Military Reservation, 1.1 mi east of Military Route 1, 4.8 mi west of Interstate 25, and 5.5 mi south of Fountain.

PRECIPITATION RECORDS

PERIOD OF RECORD.--May 1999 to current year.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 5,350 ft above sea level, from topographic map.

REMARKS.--Records good except for November through February and June 11 to July 24, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 1.19 inches, June 20, 2001.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 0.46 inch, Nov. 8.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00
7	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.05
10	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24
11	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.03
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.06
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.01	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
18	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00
22	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.02	0.00	0.01
27	0.00	0.02	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.01
28	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.04	0.08	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.00	0.71	0.05	0.24	0.03	0.04	0.13	0.42	0.05	0.36	0.23	0.68
MAX	0.00	0.46	0.04	0.08	0.03	0.02	0.06	0.16	0.02	0.16	0.22	0.25

WTR YR 2002 TOTAL 2.94 MAX 0.46

ARKANSAS RIVER BASIN

PRECIPITATION DATA AT SITES ON PINON CANYON MANEUVER SITE

A network of meteorological stations is operated on the Pinon Canyon Maneuver Site to provide precipitation data for land-condition trend analysis, long-term climatic analysis, storm-runoff modeling, and operations management during military training exercises. Other meteorological data are available upon request.

373232103555201 BEAR SPRINGS METEOROLOGICAL STATION NEAR HOUGHTON, CO

LOCATION.--Lat 37°32'32", long 103°55'55", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.5, T.29 S., R.58 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site approximately 100 ft north of Military Supply Road 1, 5.8 mi east of Pipeline Road, 6.7 mi southeast of Houghton, and 37 mi southwest of La Junta.

PRECIPITATION RECORDS

PERIOD OF RECORD.--August 1983 to October 1998, March 1999 to current year. Site was part of a hydrologic study 1983-92, data published elsewhere.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 5,200 ft above sea level, from topographic map.

REMARKS.--Records good except for November through February and estimated daily precipitation, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 2.82 inches, May 3, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 1.50 inches, July 22.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.01	0.41	0.00
3	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.00
5	0.03	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00
8	0.00	0.06	0.00	0.00	0.00	0.00	0.03	0.04	0.00	e0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.20
10	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	e0.11	0.00	0.34
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00
12	0.04	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	e0.00	0.00	0.00
13	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.49	e0.00	0.00	0.37
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	e0.00	0.00	0.01
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00
18	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.27
19	0.00	0.03	0.00	0.00	0.16	0.00	0.00	0.00	0.00	e0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00
22	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.50	0.75	0.00
23	0.00	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.01	0.01
28	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.02	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.01	0.00	0.64	0.02
30	0.00	0.00	0.10	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.07	0.68	0.14	0.17	0.18	0.11	0.11	0.12	1.43	1.62	1.88	1.22
MAX	0.04	0.54	0.10	0.09	0.16	0.10	0.06	0.06	0.61	1.50	0.75	0.37

WTR YR 2002 TOTAL 7.73 MAX 1.50

e Estimated.

PRECIPITATION DATA AT SITES ON PINON CANYON MANEUVER SITE--Continued

372319104073301 BROWN SHEEP CAMP METEOROLOGICAL STATION NEAR TYRONE, CO

LOCATION.--Lat 37°23'19", long 104°07'33", in SW¹/₄NE¹/₄ sec.33, T.30 S., R.60 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site approximately 50 ft west of Military Supply Road, 0.9 mi southwest of Brown Sheep Camp, 6.4 mi southeast of Tyrone, and 23 mi northeast of Trinidad.

PRECIPITATION RECORDS

PERIOD OF RECORD.--June 1999 to current year.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 5,390 ft above sea level, from topographic map.

REMARKS.--Records good except for November through February, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 1.44 inches, July 17, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 0.98 inch, June 4.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.05	0.00	0.01	0.00	0.00	0.00	0.68	0.09	0.00
3	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.00
5	0.01	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.05	0.00	0.00	0.00	0.00	0.04	0.01	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.34
10	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58
11	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
12	0.04	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11
19	0.00	0.01	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.10	0.00
23	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.05	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.09	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00
28	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.06	0.03
30	0.00	0.00	0.09	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.02	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.05	0.21	0.10	0.28	0.07	0.04	0.24	0.07	1.23	1.19	0.84	1.27
MAX	0.04	0.13	0.09	0.14	0.05	0.02	0.10	0.06	0.98	0.68	0.43	0.58

WTR YR 2002 TOTAL 5.59 MAX 0.98

ARKANSAS RIVER BASIN

PRECIPITATION DATA AT SITES ON PINON CANYON MANEUVER SITE--Continued

373004104032001 BURSON WELL METEOROLOGICAL STATION NEAR THATCHER, CO

LOCATION.--Lat 37°30'04", long 104°03'20", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.19, T.29 S., R.59 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site 0.3 mi south of Military Supply Road 1, 4.2 mi southeast of Thatcher, and 33 mi northeast of Trinidad.

PRECIPITATION RECORDS

PERIOD OF RECORD.--May 1999 to current year.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 5,630 ft above sea level, from topographic map.

REMARKS.--Records good except for November through February, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 1.42 inches, July 22, 2002.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 1.42 inches, July 22.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.14	0.00	e0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	e0.00	0.02	0.00	0.02	0.00	0.01	0.00	0.40	0.43	0.00
3	0.00	0.00	e0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
4	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00
5	0.07	0.00	e0.00	0.09	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00
6	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.04	e0.00	0.00	0.00	0.00	0.03	0.05	0.00	0.00	0.00	0.00
9	0.00	0.00	e0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.39
10	0.00	0.00	e0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67
11	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
12	0.07	0.00	e0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	e0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.74
14	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
15	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37
19	0.00	0.03	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.01
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00
22	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	1.42	0.68	0.00
23	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.03	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	e0.0	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.02	0.08
28	0.00	e0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
29	0.00	e0.0	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.03	0.00
30	0.00	e0.0	0.03	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.01	0.00	---	0.00	---	0.04	---	0.00	0.00	---
TOTAL	0.28	0.34	0.08	0.25	0.09	0.08	0.09	0.16	0.61	1.85	1.24	2.32
MAX	0.14	0.26	0.03	0.09	0.06	0.06	0.03	0.06	0.50	1.42	0.68	0.74

WTR YR 2002 TOTAL 7.39 MAX 1.42

e Estimated.

PRECIPITATION DATA AT SITES ON PINON CANYON MANEUVER SITE--Continued

372959104092201 CANTONMENT METEOROLOGICAL STATION NEAR CEMETERY AT SIMPSON, CO

LOCATION.--Lat 37°29'59", long 104°09'35", in SW¹/₄SE¹/₄ sec.19, T.29 S., R.60 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site approximately 200 ft north of Military Supply Road 1, 250 ft west of Simpson Cemetery, 0.4 mi east of Highway 350, and 32 mi northeast of Trinidad.

PRECIPITATION RECORDS

PERIOD OF RECORD.--July 1993 to October 1998, May 1999 to current year.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 5,630 ft above sea level, from topographic map. Prior to Mar. 25, 1999, at site 780 ft east.

REMARKS.--Records good except for November through February and estimated daily precipitation, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 1.44 inches, Apr. 26, 1998.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 0.88 inch, Sept. 13.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.17	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.05	0.00	0.02	0.00	0.00	0.00	0.13	0.50	0.00
3	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.00	0.06	0.00
5	0.04	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00
8	0.00	0.04	0.00	0.00	0.00	0.00	0.04	0.07	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.29
10	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
12	0.05	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
19	0.00	0.03	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
22	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.07	0.00
23	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.02	0.00	e0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	e0.01	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00
27	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.03	0.01
29	0.00	0.01	0.00	0.00	---	0.00	0.00	0.00	0.00	e0.00	0.04	0.00
30	0.00	0.00	0.06	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.03	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.26	0.31	0.09	0.35	0.08	0.09	0.10	0.09	0.89	0.91	0.72	1.71
MAX	0.17	0.21	0.06	0.13	0.06	0.07	0.04	0.07	0.84	0.77	0.50	0.88

WTR YR 2002 TOTAL 5.60 MAX 0.88

e Estimated.

ARKANSAS RIVER BASIN

PRECIPITATION DATA AT SITES ON PINON CANYON MANEUVER SITE--Continued

372532104093001 CANTONMENT WINDMILL METEOROLOGICAL STATION NEAR TYRONE, CO

LOCATION (REVISED).--Lat 37°25'32", long 104°09'30", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.18, T.30 S., R.60 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site 0.2 mi south of Military Supply Road 2, 3.5 mi southeast of Tyrone, and 25 mi northeast of Trinidad.

PRECIPITATION RECORDS

PERIOD OF RECORD.--March 1999 to current year.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 5,460 ft above sea level, from topographic map.

REMARKS.--Records good except for November through February, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 1.35 inches, July 17, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 0.52 inch, June 4.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.05	0.00	0.01	0.00	0.00	0.00	0.29	0.40	0.00
3	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.00	0.00
5	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00
8	0.00	0.01	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00
9	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30
10	0.02	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.35
11	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
12	0.05	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.20
19	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.11	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.15	0.00
23	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09
28	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00
29	0.00	0.01	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.05	0.00	---	0.00	0.00	0.00	0.00	0.00	0.01	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.07	0.16	0.05	0.16	0.04	0.04	0.07	0.10	0.58	0.66	0.69	1.17
MAX	0.05	0.11	0.05	0.05	0.03	0.03	0.03	0.07	0.52	0.36	0.40	0.35

WTR YR 2002 TOTAL 3.79 MAX 0.52

PRECIPITATION DATA AT SITES ON PINON CANYON MANEUVER SITE--Continued

372721103595601 CIG PIPELINE SOUTH METEOROLOGICAL STATION NEAR SIMPSON, CO

LOCATION.--Lat 37°27'21", long 103°59'56", in SE¹/₄SW¹/₄ sec.3, T.30 S., R.59 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site approximately 100 ft south of gas pipeline, 0.8 mi southwest of Taylor Arroyo, 3.4 mi northwest of Rock Crossing, 10 mi southeast of Simpson, and 36 mi northeast of Trinidad.

PRECIPITATION RECORDS

PERIOD OF RECORD.--July 1983 to September 1998, published as Taylor Arroyo Rain Gage at Pipeline near Simpson. October 1998, May 1999 to current year. Site was part of a hydrologic study 1983-92, data published elsewhere.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 5,220 ft above sea level, from topographic map.

REMARKS.--Records good except for Mar. 27 to May 17 and June 17 to July 31, which are fair and November through February, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 4.59 inches, July 27, 1998.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 1.01 inches, July 22.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.02	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.16	0.00
3	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.00	0.00	0.00
5	0.01	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.06	0.00	0.00	0.00	0.00	0.02	0.03	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38
10	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
12	0.06	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15
19	0.00	0.01	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.01
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00
22	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.01	0.01	0.00
23	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00
28	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.07	0.08
30	0.00	0.00	0.09	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.09	0.32	0.10	0.12	0.11	0.05	0.06	0.07	0.98	2.01	0.38	1.14
MAX	0.06	0.24	0.09	0.07	0.09	0.05	0.02	0.04	0.79	1.01	0.16	0.41

WTR YR 2002 TOTAL 5.43 MAX 1.01

ARKANSAS RIVER BASIN

PRECIPITATION DATA AT SITES ON PINON CANYON MANEUVER SITE--Continued

372249103573302 GUTIERREZ WINDMILL METEOROLOGICAL STATION NEAR MODEL, CO

LOCATION.--Lat 37°22'49", long 103°57'33", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.36, T.30 S., R.59 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site 0.9 mi south of Military Supply Road 2, 16 mi east of Model, and 33 mi northeast of Trinidad.

PRECIPITATION RECORDS

PERIOD OF RECORD.--March 1999 to current year.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 5,130 ft above sea level, from topographic map.

REMARKS.--Records good except for Oct. 1-31 and Mar. 1 to Aug. 2, which are fair and November through February and estimated daily precipitation, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 1.43 inches, Aug. 21, 2000 and July 22, 2002.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 1.43 inches, July 22.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	e0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	e0.00	0.37	0.09	0.00
3	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.07
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.63	0.00	0.00	0.00
5	0.01	0.00	0.00	0.04	0.00	0.00	0.00	0.00	e0.08	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00
8	0.00	0.03	0.00	0.00	0.00	0.00	0.03	0.01	e0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.35
10	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	e0.00	0.08	0.00	0.44
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.01
12	0.05	0.00	0.00	0.00	0.00	0.00	0.10	0.00	e0.00	0.00	0.00	0.00
13	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	e0.07	0.00	0.00	0.07
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.01
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00
18	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28
19	0.00	0.01	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00
22	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.43	0.20	0.00
23	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
28	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.07	0.00
30	0.00	0.00	0.08	0.00	---	0.00	0.00	0.00	0.00	0.00	0.01	0.03
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.06	0.29	0.10	0.15	0.19	0.06	0.15	0.16	0.78	1.89	0.42	1.29
MAX	0.05	0.22	0.08	0.08	0.14	0.06	0.10	0.13	0.63	1.43	0.20	0.44

WTR YR 2002 TOTAL 5.54 MAX 1.43

e Estimated.

PRECIPITATION DATA AT SITES ON PINON CANYON MANEUVER SITE--Continued

372701103514501 MINCIC METEOROLOGICAL STATION NEAR HOUGHTON, CO

LOCATION.--Lat 37°27'01", long 103°51'45", in NE¹/₄NE¹/₄ sec.11, T.30 S., R.58 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site approximately 0.1 mi west of Military Supply Road 4A, 0.7 mi south of Military Supply Road 4, 14 mi southeast of Houghton, and 40 mi northeast of Trinidad.

PRECIPITATION RECORDS

PERIOD OF RECORD.--May 1999 to current year.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 5,078 ft above sea level, from topographic map.

REMARKS.--Records good except for November through February, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 1.08 inches, Aug. 3, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 0.89 inch, Sept. 13.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.53	0.06	0.00
3	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.00	0.00	0.00
5	0.04	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.06	0.00	0.00	0.00	0.00	0.01	0.11	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.32
10	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.55
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.05	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.89
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
19	0.00	0.01	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00
22	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.01	0.00
23	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
28	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.01
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.18	0.04
30	0.00	0.00	0.03	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.09	0.41	0.06	0.19	0.16	0.07	0.04	0.40	0.54	1.08	0.57	2.06
MAX	0.05	0.33	0.03	0.10	0.13	0.06	0.03	0.20	0.37	0.53	0.20	0.89

WTR YR 2002 TOTAL 5.67 MAX 0.89

ARKANSAS RIVER BASIN

PRECIPITATION DATA AT SITES ON PINON CANYON MANEUVER SITE--Continued

373706103410701 ROURKE METEOROLOGICAL STATION NEAR HIGBEE, CO

LOCATION.--Lat 37°37'06", long 103°41'07", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.9, T.28 S., R.56 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site 0.8 mi south of Military Supply Road 1A, 3.1 mi northwest of Rourke Ranch, 16 mi southwest of Higbee, and 26 mi south of La Junta.

PRECIPITATION RECORDS

PERIOD OF RECORD.--May 1999 to current year.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 4,700 ft above sea level, from topographic map.

REMARKS.--Records good except for November through February, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 2.05 inches, July 11, 2000.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 1.00 inch, Aug. 22.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.03	0.00	0.00	0.15	0.00
3	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63	0.00	0.00	0.02
5	0.04	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.09	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.72
10	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.27
11	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
12	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.88	0.00	0.00	0.41
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
19	0.00	0.04	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
22	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
23	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76	0.00	0.00
24	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.35	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00
27	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.57	0.00
30	0.00	0.00	0.07	0.00	---	0.00	0.00	0.00	0.02	0.00	0.01	0.00
31	0.00	---	0.04	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.05	0.64	0.20	0.30	0.16	0.07	0.04	0.34	1.94	0.97	1.74	1.46
MAX	0.04	0.44	0.08	0.14	0.13	0.05	0.02	0.28	0.88	0.76	1.00	0.72

WTR YR 2002 TOTAL 7.91 MAX 1.00

PRECIPITATION DATA AT SITES ON PINON CANYON MANEUVER SITE--Continued

372329104020501 ROUTE TWO WINDMILL METEOROLOGICAL STATION NEAR TYRONE, CO

LOCATION.--Lat 37°23'29", long 104°02'05", in NW¹/₄NE¹/₄ sec.32, T.30 S., R.59 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site 0.3 mi south of Military Supply Road 2, 4.6 mi east of Brown Sheep Camp, 10 mi southeast of Tyrone, and 30 mi northeast of Trinidad.

PRECIPITATION RECORDS

PERIOD OF RECORD.--May 1999 to current year.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 5,255 ft above sea level, from topographic map.

REMARKS.--Records good except for November through February, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 1.76 inches, July 22, 2002.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 1.76 inches, July 22.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.05	0.00	0.01	0.00	0.00	0.00	0.33	0.23	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.07
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76	0.00	0.00	0.00
5	0.02	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00
8	0.00	0.05	0.00	0.00	0.00	0.00	0.03	0.01	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.45
10	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.57
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
12	0.06	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.12
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
19	0.00	0.02	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.76	0.02	0.00
23	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
28	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.11	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.01	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.08	0.32	0.12	0.24	0.12	0.05	0.14	0.06	0.91	2.11	0.44	1.39
MAX	0.06	0.23	0.11	0.12	0.08	0.04	0.09	0.05	0.76	1.76	0.23	0.57

WTR YR 2002 TOTAL 5.98 MAX 1.76

ARKANSAS RIVER BASIN

PRECIPITATION DATA AT SITES ON PINON CANYON MANEUVER SITE--Continued

373823103465601 UPPER BENT CANYON METEOROLOGICAL STATION NEAR DELHI, CO

LOCATION.--Lat 37°38'20", long 103°46'55", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.3, T.28 S., R.57 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Manuever Site approximately 80 ft north of Military Supply Road 1A, 1.2 mi above Stage Canyon, 6.7 mi west of Rourke Road, 12.9 mi east of Delhi, and 27 mi south of La Junta.

PRECIPITATION RECORDS

PERIOD OF RECORD.--July 1983 to September 1998, published as Bent Canyon Rain Gage above Stage Canyon near Delhi. October 1998, May 1999 to current year. Site was part of a hydrologic study 1983-92, data published elsewhere.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 4,860 ft above sea level, from topographic map.

REMARKS.--Records good except for November through February, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 2.55 inches, May 3, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 0.66 inch, Sept. 9.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.0	0.00
2	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.00	0.02	0.18	0.00
3	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.00	0.00	0.00
5	0.04	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.66
10	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.36
11	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
12	0.04	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.29
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.05
19	0.00	0.07	0.0	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00
22	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.24	0.00
23	0.00	0.60	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00
25	0.0	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.13	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.0	0.00	0.01	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00
28	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.61	0.01
30	0.00	0.00	0.07	0.00	---	0.00	0.00	0.00	0.00	0.00	0.01	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.08	0.78	0.18	0.26	0.26	0.16	0.06	0.19	1.33	0.22	1.08	1.39
MAX	0.04	0.60	0.09	0.13	0.24	0.12	0.04	0.06	0.60	0.11	0.61	0.66

WTR YR 2002 TOTAL 5.99 MAX 0.66

PRECIPITATION DATA AT SITES ON PINON CANYON MANEUVER SITE--Continued

373315103493101 UPPER RED ROCK CANYON METEOROLOGICAL STATION NEAR HOUGHTON, CO

LOCATION.--Lat 37°33'12", long 103°49'30", in NE¹/₄ NE¹/₄ sec.6, T.29 S., R.57 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site approximately 100 ft west of unnumbered Military Supply Road, 0.4 mi south of Military Supply Road 1, 12.2 mi southeast of Houghton, and 33 mi southwest of La Junta.

PRECIPITATION RECORDS

PERIOD OF RECORD.--August 1983 to September 1998, published as Red Rock Canyon Rain Gage at Red Rock Road. October 1998, September 1999 to current year. Site was part of a hydrologic study 1983-92, data published elsewhere.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 4,860 ft above sea level, from topographic map.

REMARKS.--Records good except for November through February, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 2.75 inches, July 19, 1993.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 1.41 inches, June 13.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.0	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.13	0.15	0.00
3	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.00	0.00	0.00
5	0.05	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.06	0.00	0.00	0.00	0.00	0.01	0.03	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.54
10	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.29
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.04	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	1.41	0.00	0.00	0.11
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
19	0.00	0.03	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00
22	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.21	0.00
23	0.00	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.03	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
28	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.79	0.02
30	0.00	0.00	0.11	0.00	---	0.00	0.00	0.00	0.00	0.00	0.01	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.09	0.63	0.13	0.21	0.47	0.11	0.02	0.21	1.94	1.28	1.20	1.02
MAX	0.05	0.49	0.11	0.12	0.30	0.11	0.01	0.14	1.41	0.98	0.79	0.54

WTR YR 2002 TOTAL 7.31 MAX 1.41

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

06614800 MICHIGAN RIVER NEAR CAMERON PASS, CO (LAT 40 29 46N LONG 105 51 52W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 03...	1615	.91	66	7.0	MAR 27...	1323	.17	65	1.5
NOV 05...	1312	.56	63	4.0	MAY 01...	1453	.61	60	1.0
JAN 24...	1215	.23	63	1.0					

06618300 ILLINOIS RIVER BELOW ISH BALDWIN DITCH NEAR WALDEN, CO (LAT 40 09 29N LONG 105 00 53W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
MAY 14...	1325	3.9	222	11.5	JUN 19...	1327	4.8	196	19.5

06618480 ILLINOIS RIVER BLW POTTER CREEK NR WALDEN, CO (LAT 40 42 31N LONG 106 16 47W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 04...	1237	.02	339	14.0	JUN 19...	1530	1.4	335	23.0
MAY 01...	1035	9.2	310	12.5					
MAY 14...	1555	1.6	390	14.5					

06693800 MOSQUITO CREEK NEAR ALMA, CO (LAT 39 16 12N LONG 106 03 02W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 01...	1355	9.4	253	8.5	MAR 06...	1120	3.2	319	.0
NOV 01...	1350	10	271	3.0	APR 22...	1222	10	269	3.7
DEC 01...	1100	3.8	301	.0	JUN 05...	1105	15	166	6.8
FEB 01...	1305	3.0	323	.0	SEP 04...	1726	4.0	283	14.4

06696980 TARRYALL CREEK AT UPPER STATION, NEAR COMO, CO (LAT 39 20 22N LONG 105 54 37W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
JUN 05...	1246	13	161	9.5	SEP 04...	1905	2.6	218	12.0
JUL 01...	1355	5.2	187	14.5					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002--Continued

06701970 SPRING CREEK ABOVE MOUTH NEAR SOUTH PLATTE, CO (LAT 39 23 37N LONG 105 11 01W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 26...	1140	.70	212	9.0	JUN 21...	1030	.43	224	18.5
MAR 27...	0950	.63	202	7.0	AUG 13...	1120	.43	233	19.5
MAY 15...	1000	.55	214	12.5					

06706400 NORTH FORK SOUTH PLATTE RIVER ABOVE ELK CREEK AT PINE, CO (LAT 39 24 27N LONG 105 19 07W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 31...	1120	121	198	7.5	MAY 20...	1445	218	255	11.0
NOV 06...	1145	94	185	5.5	JUL 03...	1015	293	263	9.5
APR 01...	1325	138	254	8.0	AUG 15...	1320	278	263	12.0

06706600 MILLER GULCH NEAR BUFFALO CREEK, CO (LAT 39 23 31N LONG 105 17 03W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
APR 17...	1430	.23	195	10.0	JUL 03...	0915	.19	202	19.5
MAY 21...	0950	.21	198	14.0	SEP 12...	1415	.17	207	17.0

06706800 BUFFALO CREEK AT MOUTH AT BUFFALO CREEK, CO (LAT 39 23 27N LONG 105 16 15W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 30...	1220	2.9	150	8.0	AUG 13...	1410	1.1	198	22.0
MAR 27...	1335	5.1	155	9.5	SEP 27...	1320	25	71	13.0
MAY 15...	1300	2.6	152	14.5	SEP 27...	1330	25	71	13.0
JUN 21...	1310	1.6	177	21.5					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002--Continued

06708800 EAST PLUM CREEK BELOW HASKINS GULCH NEAR CASTLE ROCK, CO (LAT 39 25 28N LONG 104 54 27W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT 02...	1205	1.5	550	19.5	APR 11...	1100	5.1	481	15.0
NOV 13...	1125	3.2	536	10.5	MAY 21...	1120	3.4	515	18.0
DEC 06...	1147	4.0	514	6.5	JUN 05...	1320	6.1	468	24.0
JAN 08...	1117	4.2	522	2.5	JUL 02...	1026	.86	559	23.5
FEB 07...	1030	3.1	524	.0	AUG 06...	1252	.66	556	24.0
MAR 05...	1050	7.4	580	.5	SEP 16...	1135	2.4	555	20.5

06709000 PLUM CREEK NEAR SEDALIA, CO (LAT 39 26 18N LONG 104 58 57W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT 16...	1325	5.2	584	14.5	APR 11...	1237	16	495	17.5
NOV 13...	1310	7.8	512	11.5	MAY 21...	1328	10	506	19.5
DEC 06...	1350	13	520	7.5	JUN 05...	1446	15	499	25.0
JAN 08...	1328	15	524	4.0	JUL 02...	1208	2.0	570	25.5
FEB 07...	1320	12	514	7.0	AUG 06...	1635	2.9	583	24.5
MAR 05...	1225	13	542	9.0	SEP 16...	1330	6.8	592	23.5

06709530 PLUM CREEK AT TITAN RD NEAR LOUVIERS, CO (LAT 39 30 27N LONG 105 01 23W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT 19...	1157	1.7	763	10.0	MAR 05...	1447	23	515	.5
NOV 25...	1244	4.2	610	8.5	MAR 26...	1308	12	508	10.5
NOV 13...	1520	6.1	547	9.5	APR 11...	1500	12	511	14.0
DEC 06...	1522	9.7	526	4.5	APR 23...	1514	5.9	525	20.0
DEC 20...	1523	13	515	1.0	MAY 08...	1026	5.2	504	14.0
JAN 08...	1510	11	517	1.0	MAY 17...	1238	14	511	16.0
FEB 07...	1505	15	491	.0	JUN 05...	1106	13	505	17.0

06710247 SOUTH PLATTE RIVER BELOW UNION AVE, AT ENGLEWOOD, CO (LAT 39 37 58N LONG 105 00 54W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
JUL 02...	1445	10	822	28.5	SEP 20...	1042	23	839	15.0
					SEP 30...	1512	8.4	990	21.0

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002--Continued

06710385 BEAR CREEK ABOVE EVERGREEN, CO (LAT 39 37 58N LONG 105 19 59W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 23...	0915	17	55	4.5	MAY 08...	1400	11	64	11.5
NOV 28...	1200	10	65	.0	JUN 21...	0930	8.5	70	16.0
JAN 29...	1005	8.7	69	.0	JUL 09...	1450	8.5	67	24.5
FEB 12...	1007	8.5	73	.0	AUG 08...	1024	13	84	15.0
MAR 13...	0910	9.8	81	.0	SEP 06...	1010	4.5	88	14.0
APR 12...	1155	16	72	6.5					

06710605 BEAR CREEK ABOVE BEAR CREEK LAKE NEAR MORRISON, CO (LAT 39 39 08N LONG 105 10 23W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 23...	1305	12	199	8.5	MAY 17...	1502	3.0	300	12.0
NOV 28...	1359	5.8	259	.5	JUN 21...	1405	.58	595	22.4
JAN 29...	1210	9.4	310	.0	JUL 11...	0945	.26	695	18.1
FEB 12...	1200	11	335	.5	AUG 08...	1335	2.2	338	21.1
MAR 13...	1100	1.5	430	6.0	SEP 25...	1112	1.6	328	11.8
APR 12...	1515	4.7	267	13.0					

06710992 TURKEY CREEK NEAR INDIAN HILLS, CO (LAT 39 37 03N LONG 105 13 24W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 02...	0935	.34	696	9.5	APR 22...	1543	1.1	565	11.5
NOV 06...	1055	.70	620	3.0	MAY 13...	1411	1.9	561	13.0
FEB 01...	1545	.29	823	.0	JUN 17...	1555	.06	939	16.5
MAR 06...	1355	.83	1010	.0	SEP 19...	1445	4.5	525	12.0

06712000 CHERRY CREEK NEAR FRANKTOWN, CO (LAT 39 21 21N LONG 104 45 46W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 24...	1015	3.4	222	4.5	APR 16...	1015	2.0	221	10.5
JAN 22...	1153	4.0	223	2.0	MAY 16...	1045	2.0	221	10.5
FEB 13...	0815	2.3	180	.0	MAY 14...	1135	2.4	213	11.5
MAR 12...	1055	12	201	3.5	JUL 09...	1525	.96	196	26.5
					AUG 19...	1450	.88	192	23.0

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002--Continued

393109104464500 CHERRY CREEK NEAR PARKER, CO (LAT 39 31 09N LONG 104 46 45W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
NOV 27...	1100	3.3	778	14.0	MAY 14...	1255	8.6	707	17.5
JAN 22...	1410	7.6	643	10.1	JUL 11...	1400	5.5	786	23.0
FEB 13...	1030	6.0	555	10.3	JUL 11...	1445	5.6	786	23.0
MAR 12...	1310	17	517	12.5	AUG 22...	1150	5.0	705	22.4
APR 16...	1225	6.6	723	11.5	AUG 22...	1255	5.0	705	22.4
APR 16...	1255	6.6	723	16.5	SEP 17...	0855	4.0	701	18.7

06713000 CHERRY CREEK BELOW CHERRY CREEK LAKE, CO (LAT 39 39 12N LONG 104 51 41W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
NOV 27...	1410	13	844	5.5	JUN 12...	0935	16	886	19.7
JAN 24...	1210	12	906	4.2	JUL 03...	1115	.07	859	26.6
FEB 13...	1245	18	907	4.5	JUL 03...	1145	.07	859	26.6
MAR 11...	1310	18	898	5.3	AUG 22...	1355	.02	927	27.0
APR 16...	1415	16	889	13.0	AUG 22...	1410	.02	927	27.0
APR 16...	1445	18	889	13.0	SEP 13...	1245	.51	674	19.4
MAY 14...	1455	.07	937	18.7	SEP 16...	1446	7.5	937	21.4
MAY 14...	1530	.07	937	18.7					

06713300 CHERRY CREEK AT GLENDALE, CO (LAT 39 42 22N LONG 104 56 13W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT 24...	1550	4.6	1540	10.0	APR 17...	1020	19	1030	11.0
NOV 26...	0935	14	2130	2.0	MAY 14...	1735	9.7	1450	18.0
JAN 24...	1420	22	1800	3.0	JUL 09...	1105	4.5	1100	27.5
FEB 14...	0930	24	1050	3.5	AUG 16...	1400	1.6	1420	26.5
MAR 12...	1520	22	1140	10.5	SEP 16...	1137	8.6	1150	22.0

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002--Continued

06713500 CHERRY CREEK AT DENVER, CO (LAT 39 44 58N LONG 105 00 08W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT					MAY				
10...	1005	12	977	12.7	08...	1025	14	1080	17.2
15...	1010	15	866	12.0	14...	1830	18	1080	16.1
26...	1340	10	1180	13.5	14...	1910	18	1080	16.1
NOV					20...				
05...	1105	12	1080	14.6	29...	1030	12	1030	13.7
20...	1040	12	1160	9.6	JUN				
27...	1535	15	1520	1.1	06...	0850	17	1070	16.2
DEC					12...				
04...	1040	18	1100	7.8	17...	1315	23	989	23.2
18...	1045	23	1190	5.1	17...	1020	27	1050	19.2
JAN					27...				
09...	1020	22	1120	6.5	JUL				
24...	1100	29	1290	1.5	09...	0930	17	1060	25.0
29...	1505	20	1090	5.0	12...	0940	11	1050	21.4
FEB					12...				
07...	1105	11	1150	6.9	19...	1055	11	1050	21.4
12...	1430	24	1050	6.7	29...	1040	10	1030	22.0
21...	1005	26	1010	5.5	29...	1030	10	1050	21.0
MAR					AUG				
04...	1025	29	1760	2.5	05...	1400	12	1040	27.5
15...	1115	40	233	6.2	15...	1040	10	1040	20.5
20...	1025	38	1020	7.9	23...	0905	13	869	17.6
APR					23...				
02...	0955	27	983	6.1	27...	0930	7.1	959	17.9
11...	0950	46	930	11.1	SEP				
15...	1355	25	1050	18.8	05...	0940	9.0	1030	18.0
22...	0950	11	1100	11.2	17...	1048	16	766	19.9
					23...	0950	13	1060	14.0

e Estimated.

06714215 SOUTH PLATTE RIVER AT 64TH AVE. COMMERCE CITY, CO (LAT 39 48 44N LONG 104 57 28W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT					APR				
09...	1445	66	980	12.5	12...	0840	83	2110	12.0
NOV					MAY				
05...	1330	21	1750	14.5	21...	1235	60	1130	16.0
DEC					JUN				
20...	1035	11	1960	8.0	19...	0830	38	1100	19.5
JAN					JUL				
04...	1245	9.2	1710	8.0	23...	0900	14	1870	21.0
FEB					AUG				
08...	0945	5.0	1160	8.0	26...	1200	15	1680	23.0
MAR					SEP				
07...	1040	34	1280	10.0	25...	1040	31	1250	15.5

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002--Continued

394839104570300 SAND CREEK AT MOUTH NEAR COMMERCE CITY, CO (LAT 39 48 39N LONG 104 57 03W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT 02...	1255	16	1580	21.0	MAR 04...	1510	58	3680	10.0
NOV 06...	1255	15	1610	15.5	APR 24...	1300	8.9	1750	18.5
DEC 05...	1415	17	1820	9.0	JUN 04...	0845	160	714	15.0
JAN 02...	1510	16	1800	6.0	AUG 30...	1030	54	841	19.5
FEB 05...	1525	17	1760	11.0					

06714800 LEAVENWORTH CREEK AT MOUTH NEAR GEORGETOWN, CO (LAT 39 41 14N LONG 105 41 59W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT 11...	1035	6.3	106	.3	JUN 18...	0940	12	97	8.0
APR 04...	1000	2.6	307	1.0	JUL 19...	1045	3.4	87	9.0
MAY 02...	1005	3.8	145	2.5	AUG 15...	1130	3.9	105	13.0
10...	0900	5.0	155	2.0	SEP 09...	1230	4.2	208	17.0
23...	0925	7.4	102	2.0					

394308105413800 CLEAR CREEK ABOVE GEORGETOWN LAKE NEAR GEORGETOWN, CO (LAT 39 43 08N LONG 105 41 38W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT 11...	1155	33	149	3.0	JUN 14...	1100	75	170	2.0
APR 04...	1115	30	493	2.5	JUL 02...	1220	50	112	9.0
MAY 02...	1145	36	248	4.5	AUG 13...	1000	30	145	9.0

394359105411900 CLEAR CREEK BELOW GEORGETOWN LAKE NEAR GEORGETOWN, CO (LAT 39 43 59N LONG 105 41 19W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT 11...	1320	32	148	5.5	APR 24...	0945	35	450	5.5
NOV 06...	0900	33	285	4.0	MAY 10...	1020	45	144	8.0
DEC 14...	1000	22	257	1.0	JUN 18...	1150	76	108	12.5
JAN 25...	1040	21	190	2.0	JUL 24...	0905	37	116	16.0
FEB 28...	0950	15	187	2.5	AUG 22...	0920	23	162	15.0
MAR 13...	1315	16	401	3.5	SEP 09...	1350	18	200	17.5

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002--Continued

06715000 CLEAR CREEK ABOVE WEST FORK CLEAR CREEK NEAR EMPIRE, CO (LAT 39 45 07N LONG 105 39 41W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 11...	0850	35	340	2.5	JUN 14...	0950	81	130	4.5
MAR 13...	0755	20	205	2.5	JUL 24...	0750	39	130	16.0
APR 19...	0820	43	419	5.5	AUG 15...	0950	27	172	17.0
MAY 23...	0815	61	214	1.5	SEP 18...	0905	19	165	10.5

06716100 WEST FORK CLEAR CREEK ABOVE MOUTH NEAR EMPIRE, CO (LAT 39 45 32N LONG 105 39 34W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 10...	1305	33	266	4.0	APR 04...	1035	26	960	3.0
OCT 25...	1100	24	750	.5	MAY 23...	1040	65	202	4.5
NOV 29...	1005	13	323	.0	JUN 25...	1255	72	128	13.5
DEC 14...	0835	21	504	.0	JUL 25...	0950	43	184	16.0
JAN 25...	1345	19	425	.0	AUG 09...	1010	33	180	17.0
FEB 28...	0905	21	387	.0	SEP 17...	0930	19	312	13.0
MAR 13...	1010	18	985	2.5					

06716500 CLEAR CREEK NEAR LAWSON, CO (LAT 39 45 57N LONG 105 37 32W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 16...	0930	69	466	3.0	APR 04...	1210	46	640	4.5
NOV 06...	1040	54	451	3.3	MAY 10...	0750	83	488	5.0
DEC 14...	1105	47	388	.0	JUN 14...	1210	184	140	2.5
JAN 25...	1210	37	240	.0	JUL 02...	0940	94	108	13.5
FEB 15...	1100	29	820	.0	AUG 13...	1235	51	211	14.0
MAR 13...	1145	29	698	2.0	SEP 23...	1040	42	219	10.0

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002--Continued

06717400 CHICAGO CREEK BELOW DEVILS CANYON NEAR IDAHO SPRINGS, CO (LAT 39 42 58N LONG 105 34 15W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT					JUL				
11...	1515	12	87	2.5	03...	1200	11	50	14.0
MAR					26...	0940	2.5	86	12.5
28...	1010	5.9	85	1.0	AUG				
APR					09...	1120	7.3	65	13.0
09...	0855	14	135	1.0	28...	0940	1.8	70	13.0
MAY					SEP				
01...	1230	7.9	113	7.0	17...	1035	2.8	66	11.0
23...	1155	1.6	102	6.0	26...	1000	7.0	45	17.0
JUN									
25...	1435	2.0	75	16.0					

06718300 CLEAR CREEK ABOVE JOHNSON GULCH NEAR IDAHO SPRINGS, CO (LAT 39 44 47N LONG 105 26 08W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT					APR				
16...	1130	106	438	3.0	09...	1010	64	757	5.0
NOV					MAY				
06...	1205	84	502	5.0	01...	1005	104	510	6.5
JAN					JUN				
24...	1045	31	685	.0	04...	1025	309	214	9.0
FEB					JUL				
20...	1000	36	287	.0	25...	0820	93	162	17.0
MAR					AUG				
06...	0855	29	1080	.0	13...	1215	e100	230	14.5
22...	0830	40	353	.0	26...	1000	60	226	14.0
22...	1005	3.4	2280	.0					

e Estimated.

06718550 NORTH CLEAR CREEK ABOVE MOUTH NEAR BLACKHAWK, CO (LAT 39 44 56N LONG 105 23 57W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT					APR				
01...	1300	5.7	584	12.5	09...	1250	9.2	400	7.5
25...	0920	3.8	1250	1.0	MAY				
NOV					01...	1120	9.7	645	7.5
29...	1215	3.3	720	.5	JUN				
DEC					12...	1335	14	580	18.5
20...	1215	5.8	1060	.0	JUL				
JAN					03...	0935	11	250	16.0
24...	1310	4.3	1650	.0	AUG				
FEB					14...	1200	2.5	609	19.0
20...	1120	3.2	2850	.5	SEP				
MAR					17...	1205	2.8	724	16.5
06...	0945	3.1	1580	.5					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002--Continued

06719505 CLEAR CREEK AT GOLDEN, CO (LAT 39 45 11N LONG 105 14 05W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 01...	1010	129	205	10.5	MAY 01...	0720	80	626	9.5
NOV 05...	1120	79	440	4.5	JUN 04...	0900	284	274	10.5
DEC 14...	1345	70	327	1.0	JUL 03...	0800	145	154	11.0
JAN 04...	1100	52	496	.0	AUG 02...	0810	56	230	17.0
FEB 01...	1055	43	383	.0	15...	1020	58	250	15.0
22...	1000	42	357	.0	28...	1145	42	284	17.5
APR 09...	0805	66	1000	5.3	SEP 09...	1100	43	285	17.5
					12...	1430	72	277	17.0

06720820 BIG DRY CREEK AT WESTMINSTER, CO (LAT 39 54 20N LONG 105 02 04W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
MAY 31	1310	10	847	24.1	AUG 30...	1005	1.6	1550	16.9
JUN 28...	1505	14	488	22.6	SEP 27...	1045	1.4	1710	12.4
JUL 30...	1435	10	543	23.3					

06720990 BIG DRY CREEK AT MOUTH NEAR FORT LUPTON, CO (LAT 40 04 09N LONG 104 49 52W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 26...	1010	16	1290	6.5	JUL 27...	1855	2.3	1140	25.5
NOV 30...	0930	24	1440	1.5	AUG 29...	1148	3.7	1160	19.5
MAY 31...	1130	34	1230	22.0	SEP 18...	1310	33	1110	18.5
JUN 28...	1225	20	1100	23.0					

06725450 ST. VRAIN CREEK BELOW LONGMONT, CO (LAT 40 09 29N LONG 105 00 53W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 02...	0930	59	1160	16.0	APR 12...	1125	33	2010	10.0
DEC 03...	1115	44	1450	5.0	30...	0850	33	1160	12.0
JAN 14...	1100	36	1820	2.0	JUN 11...	0850	69	1180	15.5
28...	1220	37	1210	4.5	JUL 01...	1420	67	963	24.0
FEB 11...	0900	27	1290	2.0	AUG 12...	1050	50	1720	21.5
28...	1310	42	3250	2.5	SEP 13...	0850	72	1360	18.0
MAR 29...	1105	36	1380	9.0					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002--Continued

06730200 BOULDER CREEK AT NORTH 75TH STREET NEAR BOULDER, CO (LAT 40 03 06N LONG 105 10 42W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT 02...	1225	56	686	21.5	APR 05...	1110	46	677	15.0
NOV 19...	1150	46	1280	9.5	NOV 25...	1020	64	1250	15.0
DEC 17...	0910	45	646	10.0	JUN 11...	1210	126	590	18.5
JAN 14...	1420	34	624	13.5	JUL 01...	1040	62	435	22.0
FEB 05...	1025	40	609	13.0	AUG 02...	1110	118	598	22.0
MAR 05...	1100	41	865	12.5	SEP 13...	1210	67	704	21.0

06730400 COAL CREEK NEAR LOUISVILLE, CO (LAT 39 58 34N LONG 105 07 00W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT 02...	1040	2.5	951	16.0	APR 05...	1020	1.1	1160	9.5
NOV 19...	1020	2.3	1990	6.5	NOV 30...	1125	1.4	1140	17.5
DEC 17...	1135	1.6	1090	5.5	JUN 11...	1015	1.2	1090	17.0
JAN 14...	1220	1.7	1540	11.0	JUL 01...	1145	.23	1130	24.0
FEB 05...	1210	1.3	1090	1.5	AUG 02...	0915	.03	1120	17.0
MAR 05...	0930	1.4	1690	2.5	NOV 16...	1000	.06	1060	19.5
					MAR 27...	0940	.44	1860	18.0
					SEP 13...	1010	1.6	930	16.0

06730500 BOULDER CREEK AT MOUTH, NEAR LONGMONT, CO (LAT 40 09 08N LONG 105 00 52W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
APR 30...	1000	1.1	1240	11.0	SEP 13...	0740	4.3	1310	18.0
JUL 01...	1250	1.3	1170	26.5					

06746095 JOE WRIGHT CREEK ABOVE JOE WRIGHT RESERVOIR, CO (LAT 40 32 24N LONG 105 52 56W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT 03...	1403	3.9	64	8.5	MAY 01...	1613	1.5	88	.5
NOV 05...	1435	2.3	69	2.5	MAY 15...	1140	2.9	61	2.0
MAR 27...	1655	.67	84	.0	JUN 20...	1120	18	45	8.5
					AUG 01...	1235	.85	67	16.0
					AUG 28...	1029	.47	80	10.5

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002--Continued

06746110 JOE WRIGHT CREEK BELOW JOE WRIGHT RESERVOIR, CO (LAT 40 33 43N LONG 105 52 09W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 03...	1250	2.7	45	8.0	MAY 01...	1725	4.9	61	2.0
NOV 05...	1142	2.6	46	2.5	MAY 15...	1325	7.0	57	2.5
JAN 25...	1027	2.7	51	1.0	JUN 20...	1245	8.9	43	7.5
MAR 28...	1012	2.8	52	1.5	AUG 01...	1410	2.0	43	9.5
					AUG 27...	1448	60	50	6.5

06751150 NORTH FORK CACHE LA POUVRE RIVER BELOW HALLIGAN RESERVOIR NEAR VIRGINIA DALE, CO (LAT 40 52 42N LONG 105 20 15W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 19...	1137	4.6	149	8.0	APR 16...	1122	1.1	143	8.0
NOV 21...	1350	5.0	149	5.0	MAY 30...	1253	3.6	134	14.0
DEC 18...	1457	2.9	157	3.0	JUN 28...	1240	32	137	18.5
FEB 13...	--	3.1	174	4.5	AUG 28...	1230	2.0	169	18.0
MAR 13...	1305	88	156	3.5					

06751490 NORTH FORK CACHE LA POUVRE R. AT LIVERMORE, CO (LAT 40 47 15N LONG 105 15 06W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 19...	0848	6.8	389	5.0	APR 16...	0846	5.7	337	8.0
NOV 21...	1040	8.2	340	.5	MAY 30...	1009	5.5	330	17.0
DEC 18...	1107	7.0	356	.0	JUN 24...	1356	4.0	373	26.0
FEB 22...	1316	7.2	321	3.0	JUL 19...	1320	1.5	406	25.5
MAR 13...	1500	4.8	385	8.5	AUG 28...	1043	2.6	390	18.0

06759500 SOUTH PLATTE RIVER AT FORT MORGAN, CO (LAT 40 16 08N LONG 103 48 02W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
FEB 04...	1505	323	1540	4.6	JUN 06...	1652	619	1280	26.0
MAR 05...	1435	639	1450	6.5	JUL 03...	0913	83	1700	22.0
APR 24...	0945	37	1780	11.5	SEP 05...	1225	55	1750	23.5

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002--Continued

07079195 EAST FORK ARKANSAS RIVER AT HIGHWAY 91 NEAR LEADVILLE, CO (LAT 39 17 09N LONG 106 16 45W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT 03...	0840	15	179	4.0	APR 03...	1115	7.2	193	2.0
NOV 07...	0730	10	187	2.0	MAY 01...	1300	23	170	7.0
DEC 06...	1115	11	191	.0	JUN 05...	1030	46	124	6.0
JAN 04...	1105	8.7	193	.0	JUL 03...	1320	15	175	11.0
FEB 07...	1645	5.9	188	.0	AUG 07...	1345	14	193	13.0
MAR 06...	1425	5.5	201	.0	SEP 04...	1130	6.4	211	10.5

07079300 EAST FORK ARKANSAS RIVER AT US HWY 24 NEAR LEADVILLE, CO (LAT 39 16 21N LONG 106 18 21W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT 03...	0930	20	268	5.0	APR 03...	1200	11	303	7.0
NOV 07...	0815	14	297	3.0	MAY 01...	1455	25	242	10.0
DEC 06...	1200	13	290	1.5	JUN 05...	1100	48	106	7.5
JAN 04...	0930	9.6	294	.0	JUL 03...	1330	18	251	13.5
FEB 07...	1540	8.4	307	2.0	AUG 07...	1400	16	285	15.0
MAR 06...	1245	7.3	337	2.0	SEP 04...	1230	8.7	367	11.5

07081200 ARKANSAS RIVER NEAR LEADVILLE, CO (LAT 39 15 26N LONG 106 20 35W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT 03...	1050	26	223	7.0	APR 03...	1400	30	190	4.5
NOV 07...	0915	21	235	3.0	MAY 01...	1630	63	136	11.0
DEC 06...	1300	21	240	1.5	JUN 04...	1330	101	68	8.5
JAN 04...	1230	16	238	.5	JUL 10...	1235	25	175	14.0
FEB 08...	1120	13	250	1.0	AUG 08...	1815	22	235	15.5
MAR 06...	1615	14	247	1.0	SEP 04...	1430	9.5	295	15.5

07087050 ARKANSAS RIVER BELOW GRANITE, CO (LAT 38 59 42N LONG 106 13 11W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT 02...	1445	161	161	11.5	JUL 11...	0815	184	126	12.0
MAR 13...	1335	168	143	5.0	AUG 08...	2000	181	133	17.5
APR 03...	1630	148	145	7.5	SEP 04...	1645	165	113	16.0
MAY 06...	1710	298	105	13.0	MAY 16...	1520	106	154	14.0

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002--Continued

07096250 FOURMILE CREEK BELOW CRIPPLE CREEK NEAR VICTOR, CO (LAT 38 39 52N LONG 105 13 37W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 02...	1100	7.4	376	12.5	APR 30...	1050	4.2	396	12.0
NOV 06...	1020	7.1	357	7.5	JUN 17...	1055	11	265	18.0
DEC 03...	1205	6.6	397	2.0	JUL 17...	1210	19	237	21.5
MAR 20...	1110	8.7	486	5.5					

07099050 BEAVER CREEK ABOVE UPPER BEAVER CEMETERY NEAR PENROSE, CO (LAT 38 33 42N LONG 105 01 17W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 01...	1025	9.6	95	12.5	FEB 14...	1025	14	105	.0
NOV 05...	1350	7.2	96	11.5	APR 29...	0955	3.7	117	9.5
NOV 15...	1105	8.9	96	6.5	JUL 24...	1210	3.9	117	23.0
DEC 04...	0925	10	96	.5					

07099990 FOUNTAIN CREEK AT GREEN MOUNTAIN FALLS, CO (LAT 38 56 20N LONG 105 00 55W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 02...	1210	.94	668	13.0	FEB 22...	1200	1.1	580	6.0
NOV 07...	1305	1.0	627	10.0	MAR 28...	1245	1.5	472	11.5
NOV 20...	1005	.97	640	4.0	MAY 01...	1350	.93	544	15.5
DEC 13...	1525	.94	574	2.0	AUG 05...	1640	.42	695	17.5
JAN 09...	1145	1.0	590	5.0	SEP 03...	1520	.41	696	15.0
JAN 25...	1330	1.2	587	4.5					

07103785 DEADMANS CREEK ABOVE DEADMANS LAKE AT U.S. AIR FORCE ACADEMY, CO (LAT 39 01 27N LONG 104 54 03W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 10...	1250	.04	123	6.5	FEB 15...	1310	.05	105	.0
NOV 15...	1225	.08	109	5.0	MAR 07...	1150	.11	102	.5
DEC 14...	1100	.06	111	.0	APR 08...	1130	.16	96	6.0
JAN 08...	1240	.07	104	1.0	MAY 09...	1130	.09	105	7.5

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002--Continued

07103790

MONUMENT CREEK BELOW SEWAGE TREATMENT PLANT AT U.S. AIR FORCE ACADEMY, CO (LAT 38 58 53N LONG 104 49 50W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT 10...	1410	10	298	11.0	MAY 09...	1245	5.2	360	15.0
NOV 16...	1350	5.3	384	10.0	JUN 25...	1015	3.3	416	19.0
DEC 03...	1400	6.8	406	5.0	AUG 07...	1430	2.1	399	25.0
APR 04...	1305	6.0	397	14.0					
11...	1730	7.4	351	15.0					
19...	1330	9.0	329	15.5					

07103797

WEST MONUMENT CREEK BELOW RAMPART RESERVOIR, CO (LAT 38 58 30N LONG 104 57 18W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT 09...	1630	3.5	60	11.0	MAY 01...	1230	3.5	65	7.0
NOV 14...	1200	2.8	64	7.0	JUL 16...	1210	3.1	62	9.0
DEC 13...	1410	3.1	64	3.5	AUG 05...	1450	3.1	61	11.0
JAN 09...	1000	3.1	64	3.5	SEP 03...	1400	3.1	64	15.0
MAR 04...	1330	3.0	65	3.5					
28...	1025	3.4	66	4.0					

07103800

WEST MONUMENT CREEK AT U.S. AIR FORCE ACADEMY, CO (LAT 38 58 14N LONG 104 54 08W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT 10...	1510	.45	102	7.0	MAR 07...	1335	.47	93	.5
NOV 15...	1330	.54	93	5.0	APR 08...	1235	.42	91	5.5
DEC 14...	1220	.54	97	.0	MAY 09...	1355	.32	96	8.5
JAN 09...	1215	.37	95	1.5	JUN 24...	1120	.37	106	14.0
FEB 15...	1535	.41	96	.0	AUG 08...	0835	.26	110	13.5

07103930

WEST MONUMENT CREEK AT MOUTH AT U.S. AIR FORCE ACADEMY, CO (LAT 38 57 32N LONG 104 50 08W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT 10...	1555	.47	195	10.5	FEB 15...	1645	1.7	148	.5
NOV 16...	1440	.89	186	8.0	MAR 07...	1500	.35	172	4.5
DEC 14...	1315	.41	217	2.0	APR 04...	1155	1.4	169	7.5
JAN 09...	1325	1.3	168	.5	JUN 24...	1205	.05	232	16.5

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002--Continued

07103940 MONUMENT CREEK AT SOUTH BOUNDARY AT U.S. AIR FORCE ACADEMY, CO (LAT 38 57 15N LONG 104 50 00W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 26...	1210	6.6	332	7.0	MAR 07...	1600	8.0	390	9.0
NOV 16...	1535	6.6	327	10.0	APR 04...	1045	8.0	343	7.5
DEC 14...	1410	13	386	.5	MAY 09...	1510	5.9	348	17.0
JAN 08...	1405	12	355	.5	JUN 24...	1350	3.3	379	20.5
FEB 15...	1740	15	370	.0	AUG 08...	0940	2.3	385	17.5

07103960 KETTLE CREEK ABOVE U.S. AIR FORCE ACADEMY, CO (LAT 38 58 34N LONG 104 47 55W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 10...	1055	.32	492	8.0	MAR 29...	1110	.86	416	10.0
NOV 14...	1355	.40	457	10.5	JUN 24...	1040	.04	552	19.0
DEC 03...	1230	.75	443	1.5					

07104000 MONUMENT CREEK AT PIKEVIEW, CO (LAT 38 55 04N LONG 104 49 05W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 02...	0940	18	588	13.0	MAR 19...	1330	16	546	13.0
NOV 06...	1320	20	559	13.0	JUN 25...	1315	12	531	22.5
DEC 17...	1200	25	557	.5	SEP 10...	1145	83	261	15.0
JAN 08...	1110	19	517	.0					
JAN 25...	1145	24	480	.0					

07105000 BEAR CREEK NEAR COLORADO SPRINGS, CO (LAT 38 49 21N LONG 104 53 17W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 02...	1400	.78	105	11.5	MAR 07...	1525	.76	87	2.0
NOV 07...	1355	.86	97	8.0	APR 23...	1409	.72	87	9.5
DEC 17...	1410	.84	87	2.0	JUN 28...	1305	.36	110	14.5
JAN 03...	1448	.92	85	1.0	SEP 06...	1508	.38	121	15.5
FEB 20...	1630	.82	87	1.5					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002--Continued

07105490 CHEYENNE CREEK AT EVANS AVENUE AT COLORADO SPRINGS, CO (LAT 38 47 26N LONG 104 51 49W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
MAR 28...	1628	.48	183	8.0	SEP 06...	1404	.42	144	19.0
JUL 01...	1457	.39	139	19.0					

07105900 JIMMY CAMP CREEK AT FOUNTAIN, CO (LAT 38 41 04N LONG 104 41 17W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT 02...	1020	1.9	2920	13.5	APR 09...	1217	1.9	2800	16.0
FEB 19...	1548	1.7	2740	11.5	JUN 28...	1117	.91	2990	17.5

07105945 ROCK CREEK ABOVE FORT CARSON RESERVATION, CO (LAT 38 42 27N LONG 104 50 46W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT 09...	1125	.06	216	12.0	MAR 13...	1020	.26	185	2.5
NOV 09...	1050	.15	213	6.0	JUL 03...	0920	2.2	208	15.5
JAN 22...	1105	.20	196	1.0					

07108900 ST. CHARLES RIVER AT VINELAND, CO (LAT 38 14 44N LONG 104 29 09W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT 03...	1250	6.3	2390	19.5	MAR 07...	1000	8.0	2380	7.0
NOV 05...	1350	8.0	2240	15.0	APR 10...	1010	5.3	2490	12.0
DEC 04...	1030	7.8	2430	5.0	MAY 06...	1225	3.5	2530	22.5
JAN 08...	1125	7.8	2410	7.0	JUN 04...	1100	2.9	2340	16.5
FEB 06...	1300	6.2	2450	7.0	SEP 17...	1320	4.9	2470	21.0

07116500 HUERFANO RIVER NEAR BOONE, CO (LAT 38 13 30N LONG 104 15 37W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
NOV 14...	1035	.88	4880	12.5	MAR 07...	1145	1.8	5160	13.5
DEC 04...	1215	1.1	5010	9.0	APR 09...	1050	1.6	5060	18.5
JAN 08...	1450	2.0	4800	10.0	MAY 09...	1015	.70	5350	14.0
FEB 08...	0915	3.1	4940	.5					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002--Continued

07119500 APISHAPA RIVER NEAR FOWLER, CO (LAT 38 05 28N LONG 103 58 52W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 05...	1225	6.4	2270	13.0	FEB 07...	1500	2.7	3000	9.5
NOV 06...	1350	7.4	2250	13.0	MAR 06...	0915	2.9	3040	6.5
DEC 03...	1415	4.1	2910	10.5	JUN 03...	1455	2.7	2440	25.0
JAN 07...	1030	3.6	2950	5.5					

07121500 TIMPAS CREEK AT MOUTH NEAR SWINK, CO (LAT 38 00 11N LONG 103 39 20W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 09...	1115	52	1970	16.0	APR 08...	1520	24	2340	16.5
NOV 06...	1110	60	1920	12.0	MAY 07...	1040	17	2870	14.5
DEC 03...	1125	36	2310	8.0	JUN 03...	1150	17	2430	22.0
JAN 07...	1245	16	2930	9.0	JUL 08...	1230	17	2320	24.0
FEB 07...	1050	14	2990	7.0	SEP 06...	0745	8.2	2720	15.5
MAR 06...	1410	12	3000	14.0					

07124200 PURGATOIRE RIVER AT MADRID, CO (LAT 37 07 46N LONG 104 38 22W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 16...	1250	15	557	10.5	JUN 28...	1900	47	535	17.0
DEC 17...	1355	14	922	.5	JUL 12...	0855	9.1	825	19.0
FEB 27...	1455	19	729	3.5	18...	1240	3.8	1040	29.0
APR 12...	0955	12	701	10.0	29...	1600	5.8	814	22.0
MAY 22...	0935	18	568	12.0	AUG 21...	1020	3.3	1000	21.0
					SEP 03...	1230	2.2	1340	19.5

07124410 PURGATOIRE RIVER BELOW TRINIDAD LAKE, CO (LAT 37 08 38N LONG 104 32 50W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 16...	0950	.76	465	11.5	MAY 22...	1235	62	573	14.0
DEC 17...	1550	.35	491	2.5	JUN 28...	1715	38	591	18.5
FEB 27...	1635	.33	715	5.0	JUL 18...	1405	3.5	603	19.0
APR 12...	1405	9.5	555	8.0	AUG 02...	1820	1.8	610	20.0
23...	1700	21	558	11.0	21...	1340	11	623	19.5

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002--Continued

07126300 PURGATOIRE RIVER NEAR THATCHER, CO. (LAT 37 21 23N LONG 103 53 59W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT 23...	1000	18	2910	11.0	MAY 17...	1450	1.1	4690	19.0
DEC 20...	1530	13	3260	.5	JUN 18...	1350	.10	4730	29.5
FEB 26...	1310	20	3240	1.5	JUL 30...	1045	.64	1760	26.5
APR 01...	1705	8.9	3460	17.5					

07128500 PURGATOIRE RIVER NEAR LAS ANIMAS, CO (LAT 38 02 02N LONG 103 12 00W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT 02...	1530	6.1	2070	23.0	MAR 05...	1425	32	3360	7.5
NOV 07...	0910	20	3290	8.5	28...	1540	9.2	4000	18.5
DEC 04...	1150	22	3340	5.0	JUN 04...	1815	1.8	3720	18.5
JAN 15...	1300	31	3340	1.0	AUG 06...	1345	.40	3360	32.5
FEB 12...	1350	23	3320	4.5	SEP 17...	1835	54	1150	21.5

07133000 ARKANSAS RIVER AT LAMAR, CO (LAT 38 06 21N LONG 102 37 05W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
FEB 13...	1240	9.5	3480	10.0	SEP 04...	1130	5.8	3470	22.5
JUN 20...	1245	514	2690	22.0	18...	1050	5.3	3560	16.0
AUG 06...	1835	18	3540	26.0					

07134100 BIG SANDY CREEK NEAR LAMAR, CO (LAT 38 06 51N LONG 102 29 00W)

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT 24...	1215	5.9	4590	12.0	MAR 06...	1550	23	4000	10.5
NOV 21...	1420	10	4190	9.5	27...	1245	10	4300	17.0
JAN 16...	1220	14	4340	3.5	SEP 18...	1305	4.4	4240	16.5

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002--Continued

07134180 ARKANSAS RIVER NEAR GRANADA, CO (LAT 38 05 44N LONG 102 18 37W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT 24...	1350	98	3760	14.0	JUN 20...	1450	330	2760	25.5
NOV 21...	1200	65	4030	8.0	JUL 30...	1130	5.1	4250	--
NOV 27...	1355	61	4090	5.0	AUG 14...	1225	3.0	4420	26.5
DEC 11...	1510	80	4080	7.5	SEP 04...	1600	6.0	4210	25.0
JAN 16...	1300	77	4130	5.5	SEP 18...	1635	61	3800	19.5
MAR 06...	1734	43	4100	11.0					
MAR 27...	1735	13	4300	17.0					

07134990 WILD HORSE CREEK ABOVE HOLLY, CO (LAT 38 03 24N LONG 102 08 16W)

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
OCT 24...	1620	36	4010	12.0	MAR 27...	1610	8.5	3910	16.0
NOV 21...	1020	31	4180	6.0	AUG 07...	1230	.62	3940	28.0
DEC 11...	1310	10	3890	7.0	SEP 18...	1455	6.6	4020	19.5

GRAND LAKE OUTLET BASIN

BIG THOMPSON PROJECT

The primary objective of this sampling program is to establish a baseline water quality network. The sites in this program make up a large portion of the Colorado/Big Thompson Water Diversion project and constitute a cooperative effort between the USGS, The Big Thompson Watershed Forum, North Front Range Water Quality Planning Association, US Bureau of Reclamation, State Engineer, water managers, and Colorado State University.

09013000 ALVA B. ADAMS TUNNEL AT EAST PORTAL, NEAR ESTES PARK, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°19'40", long 105°34'39", in SW¹/₄NW¹/₄ sec.9, T.4 N., R.73 W., Larimer County, Hydrologic Unit 10190006, on right bank at upstream end of Aspen Creek siphon, 700 ft downstream from east portal, and 4.5 mi southwest of Estes Park.

PERIOD OF RECORD.--September 1970 to current year. Water-discharge records published from October 1946 to September 1998 (monthly discharge only for August and September 1947).

REMARKS.--Field data collected prior to 1974 water year are available in district office.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	TURBID- ITY LAB HACH 2100AN (NTU) (099872)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L) AS CACO3 (00900)	CALCIUM DIS- SOLVED (MG/L) AS CA (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L) AS MG (00925)	SODIUM, DIS- SOLVED (MG/L) AS NA (00930)	SODIUM AD- SORP- TION RATIO (00931)
OCT													
23...	0845	566	42	8.0	7.7	--	--	8.0	--	--	--	--	--
23...	0846	--	--	--	--	.70	--	--	17	5.30	1.00	1.60	.2
DEC													
04...	0850	551	45	7.9	3.8	--	--	9.1	--	--	--	--	--
04...	0851	--	--	--	--	.65	--	--	21	6.50	1.20	1.80	.2
JAN													
08...	0850	559	53	7.9	2.6	--	--	10.8	--	--	--	--	--
08...	0851	--	--	--	--	.70	--	--	23	7.00	1.30	2.00	.2
FEB													
05...	0850	512	52	7.7	2.4	--	--	9.5	--	--	--	--	--
05...	0851	--	--	--	--	.60	--	--	24	7.40	1.40	2.30	.2
MAR													
19...	0845	553	57	7.1	2.5	--	--	8.9	--	--	--	--	--
19...	0846	--	--	--	--	.50	--	--	23	7.00	1.30	2.00	.2
APR													
16...	0850	e204	46	7.9	4.0	--	1.0	8.0	21	6.56	1.15	1.88	.2
MAY													
07...	0900	459	51	6.6	6.0	--	1.1	8.8	22	6.66	1.27	1.95	.2
21...	0945	e510	50	7.8	9.5	--	1.7	9.0	20	6.17	1.20	1.88	.2
JUN													
04...	0850	548	38	7.3	10.0	--	1.2	9.1	17	5.20	.982	1.60	.2
25...	0905	e475	42	8.3	16.5	--	1.1	7.9	17	5.33	.989	1.69	.2
JUL													
09...	0900	e250	48	8.0	17.5	--	1.5	7.2	19	5.96	1.11	1.85	.2
23...	0920	e255	49	8.1	19.0	--	2.3	7.0	20	6.05	1.13	1.84	.2
AUG													
06...	0930	551	52	8.4	18.5	--	1.1	7.0	22	6.63	1.20	2.05	.2
SEP													
10...	0850	249	60	9.3	16.0	--	3.8	7.3	23	7.15	1.33	2.06	.2

e Estimated.

BIG THOMPSON PROJECT--Continued

09013000 ALVA B. ADAMS TUNNEL AT EAST PORTAL, NEAR ESTES PARK, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT.DIS FET LAB (MG/L CACO3) (29801)	ALKA- LINITY WAT DIS TOT FET LAB MG/L AS CACO3 (00421)	BICAR- BONATE WAT.DIS FET LAB (MG/L HCO3) (29805)	CAR- BONATE WAT.DIS FET LAB (MG/L CO3) (29808)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
OCT													
23...	--	--	--	--	--	--	--	--	--	--	--	<.013	<.015
23...	--	--	20	24	<3.0	2.8	<.5	24	--	--	--	--	--
DEC													
04...	--	--	--	--	--	--	--	--	--	--	--	.033	<.015
04...	--	--	24	29	<3.0	2.8	<.5	42	--	--	--	--	--
JAN													
08...	--	--	--	--	--	--	--	--	--	--	--	.016	<.015
08...	--	--	26	32	<3.0	4.1	1.1	42	--	--	--	--	--
FEB													
05...	--	--	--	--	--	--	--	--	--	--	--	E.012	<.015
05...	--	--	23	28	<3.0	3.0	.7	38	--	--	--	--	--
MAR													
19...	--	--	--	--	--	--	--	--	--	--	--	.026	<.015
19...	--	--	30	37	<3.0	4.0	1.2	56	--	--	--	--	--
APR													
16...	.61	22	--	--	--	2.6	.53	34	27	.05	--	.034	<.015
MAY													
07...	.73	24	--	--	--	2.8	.96	36	29	.05	44.9	.020	<.015
21...	.62	24	--	--	--	2.8	.44	36	27	.05	--	<.013	<.015
JUN													
04...	.55	19	--	--	--	2.2	.65	39	22	.05	58.1	<.013	<.015
25...	.50	20	--	--	--	2.3	.33	32	23	.04	--	<.013	<.015
JUL													
09...	.49	22	--	--	--	2.4	.35	34	25	.05	--	<.013	<.015
23...	.50	23	--	--	--	2.4	.33	34	26	.05	--	<.013	<.015
AUG													
06...	.47	25	--	--	--	2.5	.38	47	28	.06	70.0	<.013	<.015
SEP													
10...	.59	28	--	--	--	2.5	.38	46	31	.06	30.8	<.013	<.015

Date	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT													
23...	.17	.009	E.002	<.007	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	2.7	<5.0	<2.0	<100	<1.0	<3.0	<.10	<3.0	<.10
DEC													
04...	.19	.008	E.002	<.007	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	2.9	<5.0	<2.0	<100	<1.0	<3.0	<.10	<3.0	<.10
JAN													
08...	.20	.008	<.004	<.007	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	2.6	<5.0	<2	<100	<1	<3	<.10	<3	<.1
FEB													
05...	.16	.008	E.003	<.007	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	2.5	<5.0	<2	<100	<1	<3	<.10	<3	<.1
MAR													
19...	.16	.009	E.003	<.007	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	2.5	<1.0	<2	<100	<1	<3	<.10	<5	<.1
APR													
16...	.30	.048	.020	.012	--	.2	.5	22	<.08	.8	<.01	<.06	<1
MAY													
07...	.17	.011	<.004	<.007	--	E.1	.5	13	<.08	1.2	<.01	.12	<1
21...	.19	.012	E.003	<.007	--	E.1	.6	17	E.07	.5	<.01	.20	<1
JUN													
04...	.23	.010	E.003	<.007	--	.2	--	18	.40	.3	<.01	.09	<1
25...	.16	.010	E.003	<.007	--	.2	.5	11	<.08	.3	<.01	E.05	<1
JUL													
09...	.23	.014	E.004	<.007	--	E.1	.6	E8	<.08	.4	<.01	.24	<1
23...	.24	.008	E.003	<.007	--	.3	.5	E9	E.04	.4	<.01	.10	<1
AUG													
06...	.21	.015	.004	<.007	--	.3	.6	36	E.04	1.5	<.01	.16	<1
SEP													
10...	.38	.015	E.003	<.007	--	.4	.5	13	E.05	.8	<.01	.31	<1

E Estimated laboratory analysis value.

GRAND LAKE OUTLET BASIN

BIG THOMPSON PROJECT--Continued

09013000 ALVA B. ADAMS TUNNEL AT EAST PORTAL, NEAR ESTES PARK, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
OCT 23...	<.4	M	<.4	<.4	<.4
DEC 04...	<.4	<.4	<.4	<.4	<.4
JAN 08...	<.4	<.4	<.4	<.4	<.4
FEB 05...	<.4	<.4	<.4	<.4	<.4
MAR 19...	<.4	<.4	<.4	<.4	<.4
APR 16...	<.4	<.4	<.4	<.4	<.4
MAY 07...	<.4	<.4	<.4	<.4	<.4
21...	<.4	<.4	<.4	<.4	<.4
JUN 04...	<.4	<.4	<.4	<.4	<.4
05...	<.4	<.4	<.4	<.4	<.4
JUL 09...	<.4	<.4	<.4	<.4	<.4
23...	<.4	<.4	<.4	<.4	<.4
AUG 06...	<.4	<.4	<.4	<.4	<.4
SEP 10...	<.4	<.4	<.4	<.4	<.4

M Presence of material verified but not quantified.

BIG THOMPSON PROJECT--Continued

06733000 BIG THOMPSON RIVER AT ESTES PARK, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°22'42", long 105°30'48", in NW¹/₄NW¹/₄ sec.30, T.5 N., R.72 W., Larimer County, Hydrologic Unit 10190006, on right bank in Estes Park, 600 ft downstream from bridge on State Hwy 7, 0.3 mi northwest of Estes Power Plant, in Estes Park.

DRAINAGE AREA.--137 mi².

PERIOD OF RECORD.--August 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L) AS CACO3 (00900)	CALCIUM DIS-SOLVED (MG/L) AS CA (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) AS MG (00925)	SODIUM, DIS-SOLVED (MG/L) AS NA (00930)	SODIUM AD-SORP-TION RATIO (00931)
OCT													
22...	0855	e26	34	8.1	5.5	--	--	9.6	--	--	--	--	--
22...	0856	--	--	--	--	.85	--	--	12	3.30	.93	2.30	.3
NOV													
05...	0855	e22	35	8.5	4.0	--	--	11.0	--	--	--	--	--
05...	0856	--	--	--	--	.70	--	--	13	3.50	1.00	2.30	.3
DEC													
03...	0915	18	43	8.5	.0	--	--	10.8	--	--	--	--	--
03...	0916	--	--	--	--	.70	--	--	17	4.70	1.30	3.10	.3
JAN													
07...	0915	14	50	6.9	.0	--	--	12.5	--	--	--	--	--
07...	0916	--	--	--	--	.60	--	--	18	4.80	1.40	3.50	.4
FEB													
04...	0925	11	55	7.8	.0	--	--	14.2	--	--	--	--	--
04...	0926	--	--	--	--	.85	--	--	19	5.10	1.60	4.00	.4
MAR													
18...	0915	11	58	7.8	.0	--	--	7.0	--	--	--	--	--
18...	0916	--	--	--	--	.65	--	--	19	5.20	1.50	3.80	.4
APR													
15...	0915	e38	35	8.3	8.0	--	1.7	--	12	3.41	.944	2.44	.3
MAY													
06...	0915	49	28	8.0	6.5	--	1.7	9.8	10	2.73	.791	1.84	.3
20...	1030	170	20	7.4	7.5	--	6.6	10.4	8	2.03	.730	1.11	.2
JUN													
03...	0900	299	16	7.3	7.0	--	2.6	10.5	7	1.81	.485	.85	.1
24...	0935	e42	18	7.5	11.5	--	1.4	--	6	1.77	.462	.98	.2
JUL													
08...	0925	115	19	7.9	13.5	--	1.5	8.1	7	1.88	.496	1.07	.2
22...	0940	e74	20	7.8	14.5	--	1.6	7.9	8	2.14	.552	1.15	.2
AUG													
05...	1005	47	23	7.8	16.0	--	1.0	7.6	8	2.33	.634	1.45	.2
SEP													
09...	0850	e22	36	7.6	14.0	--	1.5	7.9	12	3.21	.921	2.01	.3

e Estimated.

BIG THOMPSON PROJECT--Continued

06733000 BIG THOMPSON RIVER AT ESTES PARK, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT.DIS FET LAB (MG/L CACO3) (29801)	ALKA- LINITY WAT.DIS TOT FET LAB (MG/L AS CACO3) (00421)	BICAR- BONATE WAT.DIS FET LAB (MG/L HCO3) (29805)	CAR- BONATE WAT.DIS FET LAB (MG/L CO3) (29808)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
OCT													
22...	--	--	--	--	--	--	--	--	--	--	--	.113	<.015
22...	--	--	12	15	<3.0	2.5	1.2	26	--	--	--	--	--
NOV													
05...	--	--	--	--	--	--	--	--	--	--	--	.104	<.015
05...	--	--	14	17	<3.0	3.8	1.2	54	--	--	--	--	--
DEC													
03...	--	--	--	--	--	--	--	--	--	--	--	.164	<.015
03...	--	--	20	24	<3.0	2.7	1.8	48	--	--	--	--	--
JAN													
07...	--	--	--	--	--	--	--	--	--	--	--	.199	<.015
07...	--	--	21	26	<3.0	3.9	2.5	40	--	--	--	--	--
FEB													
04...	--	--	--	--	--	--	--	--	--	--	--	.222	E.011
04...	--	--	16	20	<3.0	2.9	2.4	<10	--	--	--	--	--
MAR													
18...	--	--	--	--	--	--	--	--	--	--	--	.221	<.015
18...	--	--	24	29	<3.0	4.0	3.6	66	--	--	--	--	--
APR													
15...	.46	13	--	--	--	2.4	1.91	28	20	.04	--	.067	<.015
MAY													
06...	.39	11	--	--	--	2.2	1.12	29	16	.04	3.77	.028	<.015
20...	.32	8	--	--	--	1.6	.98	23	12	.03	10.7	.117	<.015
JUN													
03...	.32	7	--	--	--	1.4	.63	26	10	.03	20.7	.140	<.015
24...	.26	7	--	--	--	1.4	.59	16	10	.02	--	.132	<.015
JUL													
08...	.24	8	--	--	--	1.3	.39	14	11	.02	4.30	.128	<.015
22...	.29	9	--	--	--	1.4	.57	16	12	.02	--	.137	<.015
AUG													
05...	.30	10	--	--	--	1.6	.69	28	14	.04	3.54	.127	<.015
SEP													
09...	.46	14	--	--	--	1.9	1.40	<10	19	.03	--	.098	<.015

Date	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS DIS- SOLVED TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	CARBON, TOTAL (MG/L AS C) (00680)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT													
22...	E.10	.011	E.003	<.007	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	1.5	<5.0	<2.0	120	<1.0	M	<.10	<3.0	<.10
NOV													
05...	.12	.006	E.003	<.007	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	1.3	<5.0	<2.0	160	<1.0	M	<.10	<3.0	<.10
DEC													
03...	.14	.005	E.004	<.007	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	1.3	<5.0	<2.0	120	<1.0	M	<.10	<3.0	<.10
JAN													
07...	.10	.005	E.003	<.007	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	1.0	<5.0	<2	<100	<1	M	<.10	<3	<.1
FEB													
04...	E.07	.005	.004	<.007	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	1.0	<5.0	<2	<500	<1	M	<.10	<3	<.1
MAR													
18...	E.10	.007	E.004	<.007	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	1.5	<1.0	<2	<500	<1	10	<.10	<5	<.1
APR													
15...	.20	.013	.004	<.007	--	E.1	.9	205	<.08	5.0	<.01	.06	<1
MAY													
06...	.22	.014	E.003	<.007	--	<.2	.9	121	<.08	5.0	<.01	.12	<1
20...	.36	.037	.005	<.007	--	<.2	1.1	107	<.08	6.1	<.01	.23	<1
JUN													
03...	.21	.013	.005	<.007	--	E.1	2.9	79	.13	2.9	<.01	.17	<1
24...	.10	.009	E.003	<.007	--	<.2	.7	68	<.08	2.8	<.01	.09	<1
JUL													
08...	.14	.011	E.004	<.007	--	<.2	.7	84	E.04	3.1	<.01	.07	<1
22...	.17	.011	.005	<.007	--	E.1	.6	102	<.08	3.3	<.01	.15	<1
AUG													
05...	.13	.008	.005	<.007	--	<.2	.6	129	<.08	3.4	<.01	.10	<1
SEP													
09...	.14	.011	E.004	<.007	--	E.1	.6	140	.10	6.8	<.01	.21	<1

E Estimated laboratory analysis value.

M Presence of material verified but not quantified.

BIG THOMPSON PROJECT--Continued

06733000 BIG THOMPSON RIVER AT ESTES PARK, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
OCT 22...	<.4	M	<.4	<.4	<.4
NOV 05...	<.4	<.4	<.4	<.4	<.4
DEC 03...	<.4	<.4	<.4	<.4	<.4
JAN 07...	M	<.4	<.4	<.4	M
FEB 04...	<.4	<.4	<.4	<.4	M
MAR 18...	<.4	<.4	<.4	<.4	<.4
APR 15...	<.4	<.4	<.4	<.4	<.4
MAY 06...	<.4	<.4	<.4	<.4	<.4
20...	<.4	<.4	<.4	<.4	<.4
JUN 03...	<.4	<.4	<.4	<.4	<.4
24...	<.4	<.4	<.4	<.4	<.4
JUL 08...	<.4	<.4	<.4	<.4	<.4
22...	<.4	<.4	<.4	<.4	<.4
AUG 05...	<.4	<.4	<.4	<.4	<.4
SEP 09...	<.4	<.4	<.4	<.4	<.4

M Presence of material verified but not quantified.

PLATTE RIVER BASIN

BIG THOMPSON PROJECT--Continued

402245105302300 BIG THOMPSON RIVER BELOW SANITATION OUTFLOW ABOVE LAKE ESTES, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°22'45", long 105°30'23", in NW¹/₄NW¹/₄ sec.30, T.5 N., R.72 W., Larimer County, Hydrologic Unit 10190006, on right bank, 225 ft upstream from pedestrian bridge on Lake Estes Trail, downstream from Estes Park Sanitation District Outflow, adjacent to Lake Estes, in Estes Park.

DRAINAGE AREA.-- 138 mi².

PERIOD OF RECORD.--August 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L) AS (CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L) AS CA (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) AS MG (00925)	SODIUM, DIS-SOLVED (MG/L) AS NA (00930)	SODIUM AD-SORP-TION RATIO (00931)
OCT													
22...	0950	e26	43	7.2	5.0	--	--	10.3	--	--	--	--	--
22...	0951	--	--	--	--	.80	--	--	13	3.50	.95	3.30	.4
NOV													
05...	0955	e22	43	7.0	2.5	--	--	11.5	--	--	--	--	--
05...	0956	--	--	--	--	.95	--	--	14	3.80	1.10	3.20	.4
DEC													
03...	1025	e18	54	8.9	1.0	--	--	10.3	--	--	--	--	--
03...	1026	--	--	--	--	.90	--	--	18	5.10	1.30	4.40	.5
JAN													
07...	1110	e14	67	7.5	.0	--	--	11.6	--	--	--	--	--
07...	1111	--	--	--	--	1.0	--	--	19	5.20	1.40	5.40	.5
FEB													
04...	1040	e11	71	7.1	.0	--	--	12.1	--	--	--	--	--
04...	1041	--	--	--	--	2.0	--	--	21	5.60	1.60	6.30	.6
MAR													
18...	1030	e10	57	7.8	.5	--	--	9.6	--	--	--	--	--
18...	1031	--	--	--	--	1.5	--	--	21	5.60	1.60	6.00	.6
APR													
15...	1025	e38	41	7.5	7.5	--	2.2	--	13	3.63	.983	3.35	.4
MAY													
06...	1040	e49	32	7.6	8.5	--	1.7	9.5	10	2.89	.798	2.42	.3
20...	1140	e170	20	8.2	9.0	--	5.1	12.3	8	2.09	.583	1.30	.2
JUN													
03...	1025	e299	18	7.2	8.0	--	2.0	9.4	7	1.87	.497	.98	.2
24...	1040	e42	19	7.8	13.0	--	1.4	--	6	1.82	.466	1.24	.2
JUL													
08...	1025	e115	23	7.9	14.5	--	2.6	8.9	7	1.95	.511	1.49	.2
22...	1035	e74	26	7.8	15.0	--	1.7	8.1	8	2.28	.574	1.78	.3
AUG													
05...	1055	e47	32	7.6	17.0	--	1.2	7.8	9	2.52	.666	2.40	.3
SEP													
09...	1000	e22	50	7.9	14.5	--	1.4	8.9	13	3.46	1.13	3.43	.4

e Estimated.

BIG THOMPSON PROJECT--Continued

402245105302300 BIG THOMPSON RIVER BELOW SANITATION OUTFLOW ABOVE LAKE ESTES, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT.DIS FET LAB (MG/L CACO3) (29801)	ALKA- LINITY TOT FET LAB MG/L AS CACO3 (00421)	BICAR- BONATE WAT.DIS FET LAB (MG/L HCO3) (29805)	CAR- BONATE WAT.DIS FET LAB (MG/L CO3) (29808)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT													
22...	--	--	--	--	--	--	--	--	--	--	.122	.311	.45
22...	--	--	16	20	<3.0	2.9	2.1	26	--	--	--	--	--
NOV													
05...	--	--	--	--	--	--	--	--	--	--	.105	.210	.48
05...	--	--	16	20	<3.0	4.2	2.1	70	--	--	--	--	--
DEC													
03...	--	--	--	--	--	--	--	--	--	--	.228	.252	.42
03...	--	--	20	24	<3.0	3.3	3.1	44	--	--	--	--	--
JAN													
07...	--	--	--	--	--	--	--	--	--	--	.242	.398	.70
07...	--	--	24	29	<3.0	4.6	4.0	50	--	--	--	--	--
FEB													
04...	--	--	--	--	--	--	--	--	--	--	.326	.442	.64
04...	--	--	21	26	<3.0	3.9	4.4	52	--	--	--	--	--
MAR													
18...	--	--	--	--	--	--	--	--	--	--	.262	.578	.92
18...	--	--	30	37	<3.0	4.9	5.4	68	--	--	--	--	--
APR													
15...	.65	14	--	--	--	2.8	2.65	30	24	.04	.180	.098	.43
MAY													
06...	.53	11	--	--	--	2.5	1.68	19	18	.03	.146	<.015	.21
20...	.37	8	--	--	--	1.7	.85	23	12	.03	.159	<.015	.36
JUN													
03...	.36	7	--	--	--	1.4	.87	23	11	.03	.156	<.015	.20
24...	.35	7	--	--	--	1.5	.67	11	11	.01	.161	<.015	.12
JUL													
08...	.37	9	--	--	--	1.4	1.25	19	13	.03	.126	.177	.34
22...	.47	9	--	--	--	1.6	1.24	22	15	.03	.225	E.009	.19
AUG													
05...	.54	12	--	--	--	2.0	1.50	29	18	.04	.138	.259	.43
SEP													
09...	1.05	17	--	--	--	2.4	2.64	<10	27	.04	.113	.450	.73

Date	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT												
22...	.039	.033	.025	--	--	--	--	--	--	--	--	--
22...	--	--	--	1.9	<5.0	<2.0	140	<1.0	M	<.10	<3.0	<.10
NOV												
05...	.145	.113	.102	--	--	--	--	--	--	--	--	--
05...	--	--	--	1.8	<5.0	<2.0	140	<1.0	M	<.10	<3.0	<.10
DEC												
03...	.033	.019	.011	--	--	--	--	--	--	--	--	--
03...	--	--	--	2.0	<5.0	<2.0	130	<1.0	M	<.10	<3.0	<.10
JAN												
07...	.066	.050	.038	--	--	--	--	--	--	--	--	--
07...	--	--	--	1.5	<5.0	<2	<100	<1	M	<.10	<3	<.1
FEB												
04...	.091	.077	.062	--	--	--	--	--	--	--	--	--
04...	--	--	--	1.8	<5.0	<2	<500	<1	M	<.10	<3	<.1
MAR												
18...	.108	.065	.048	--	--	--	--	--	--	--	--	--
18...	--	--	--	2.0	<1.0	<2	110	<1	M	<.10	<5	<.1
APR												
15...	.071	.043	.032	--	E.1	1.1	190	<.08	4.7	<.01	.08	<1
MAY												
06...	.021	.007	<.007	--	<.2	1.0	122	<.08	5.1	<.01	.35	<1
20...	.047	.013	E.004	--	<.2	1.1	127	E.04	6.0	<.01	.23	<1
JUN												
03...	.017	.007	<.007	--	<.2	1.0	82	<.08	2.9	<.01	.18	<1
24...	.012	E.004	<.007	--	E.1	.7	64	E.06	2.7	<.01	.11	<1
JUL												
08...	.042	.034	.024	--	E.1	.7	79	.10	2.9	<.01	.08	<1
22...	.028	.016	.010	--	<.2	.8	94	E.05	3.3	<.01	.18	<1
AUG												
05...	.043	.028	.018	--	E.1	.8	127	<.08	3.4	<.01	.14	<1
SEP												
09...	.69	.66	.625	--	E.1	1.0	136	.25	6.4	<.01	.25	<1

E Estimated laboratory analysis value.
M Presence of material verified but not quantified.

PLATTE RIVER BASIN

BIG THOMPSON PROJECT--Continued

402245105302300 BIG THOMPSON RIVER BELOW SANITATION OUTFLOW ABOVE LAKE ESTES, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
OCT					
22...	<.4	M	<.4	<.4	<.4
NOV					
05...	<.4	M	<.4	<.4	<.4
DEC					
03...	<.4	<.4	<.4	<.4	<.4
JAN					
07...	<.4	<.4	<.4	<.4	<.4
FEB					
04...	<.4	<.4	<.4	<.4	<.4
MAR					
18...	<.4	<.4	<.4	<.4	<.4
APR					
15...	<.4	<.4	<.4	<.4	<.4
MAY					
06...	<.4	<.4	<.4	<.4	<.4
20...	<.4	<.4	<.4	<.4	<.4
JUN					
03...	<.4	<.4	<.4	<.4	<.4
24...	<.4	<.4	<.4	<.4	<.4
JUL					
08...	<.4	<.4	<.4	<.4	<.4
22...	<.4	<.4	<.4	<.4	<.4
AUG					
05...	<.4	<.4	<.4	<.4	<.4
SEP					
09...	<.4	<.4	<.4	<.4	<.4

M Presence of material verified but not quantified.

BIG THOMPSON PROJECT--Continued

06735500 BIG THOMPSON RIVER NEAR ESTES PARK, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°22'35", long 105°29'06", in NW¹/₄NE¹/₄ sec.29, T.5 N., R.72 W., Larimer County, Hydrologic Unit 10190006, on right bank, 100 ft upstream from Dry Gulch, 600 ft downstream from Olympus Dam in Estes Park.

DRAINAGE AREA.--155 mi²

PERIOD OF RECORD.--August 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	TURBID- ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)
OCT													
22...	1030	e120	42	7.1	8.0	--	--	9.6	--	--	--	--	--
22...	1031	--	--	--	--	1.5	--	--	17	5.20	.99	1.80	.2
NOV													
05...	1040	e87	42	7.3	6.5	--	--	10.3	--	--	--	--	--
05...	1041	--	--	--	--	1.5	--	--	18	5.50	1.10	1.80	.2
DEC													
03...	1125	e30	47	7.9	2.5	--	--	10.3	--	--	--	--	--
03...	1126	--	--	--	--	1.0	--	--	22	6.70	1.20	2.00	.2
JAN													
07...	1210	e20	53	7.6	2.0	--	--	11.8	--	--	--	--	--
07...	1211	--	--	--	--	1.0	--	--	23	6.90	1.30	2.10	.2
FEB													
04...	1135	e23	74	8.0	2.0	--	--	11.1	--	--	--	--	--
04...	1136	--	--	--	--	.70	--	--	24	7.40	1.40	2.40	.2
MAR													
18...	1130	e22	60	7.8	3.0	--	--	9.7	--	--	--	--	--
18...	1131	--	--	--	--	1.0	--	--	23	7.00	1.30	2.20	.2
APR													
15...	1125	e36	53	8.6	7.0	--	1.7	--	23	7.18	1.31	2.41	.2
MAY													
06...	1150	e56	49	7.4	8.5	--	1.4	9.4	21	6.33	1.24	2.04	.2
20...	1245	e139	47	7.5	11.0	--	1.7	9.2	20	6.01	1.19	1.94	.2
JUN													
03...	1135	e312	35	7.3	11.0	--	1.9	9.2	14	4.12	.835	1.49	.2
24...	1140	e126	38	8.1	16.5	--	1.1	--	15	4.53	.881	1.63	.2
JUL													
08...	1135	e117	43	8.0	18.0	--	2.1	7.5	16	4.92	.968	1.80	.2
22...	1125	e80	44	8.0	19.0	--	2.4	7.4	17	5.32	1.01	1.92	.2
AUG													
05...	1200	e71	48	8.0	18.5	--	1.2	7.4	19	5.85	1.11	2.10	.2
SEP													
09...	1100	e49	57	9.1	17.0	--	2.0	7.5	23	6.95	1.30	2.19	.2

e Estimated.

PLATTE RIVER BASIN

BIG THOMPSON PROJECT--Continued

06735500 BIG THOMPSON RIVER NEAR ESTES PARK, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT.DIS FET LAB (MG/L CACO3) (29801)	ALKA- LINITY WAT DIS TOT FET LAB MG/L AS CACO3 (00421)	BICAR- BONATE WAT.DIS FET LAB (MG/L HCO3) (29805)	CAR- BONATE WAT.DIS FET LAB (MG/L CO3) (29808)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT													
22...	--	--	--	--	--	--	--	--	--	--	E.012	E.014	.22
22...	--	--	20	24	<3.0	2.7	.5	28	--	--	--	--	--
NOV													
05...	--	--	--	--	--	--	--	--	--	--	E.012	<.015	.24
05...	--	--	20	24	<3.0	3.9	.5	74	--	--	--	--	--
DEC													
03...	--	--	--	--	--	--	--	--	--	--	.037	E.013	.22
03...	--	--	20	24	<3.0	2.8	.6	40	--	--	--	--	--
JAN													
07...	--	--	--	--	--	--	--	--	--	--	.532	.054	.15
07...	--	--	26	32	<3.0	4.1	1.2	36	--	--	--	--	--
FEB													
04...	--	--	--	--	--	--	--	--	--	--	.019	<.015	.19
04...	--	--	23	28	<3.0	3.1	.8	38	--	--	--	--	--
MAR													
18...	--	--	--	--	--	--	--	--	--	--	.028	<.015	.19
18...	--	--	29	35	<3.0	4.0	1.4	62	--	--	--	--	--
APR													
15...	.69	25	--	--	--	2.7	1.04	30	30	.04	<.013	<.015	.24
MAY													
06...	.78	21	--	--	--	2.7	.72	31	27	.04	.019	<.015	.19
20...	.69	22	--	--	--	2.7	.59	37	26	.05	<.013	<.015	.23
JUN													
03...	.52	15	--	--	--	2.1	.71	33	19	.04	.053	<.015	.25
24...	.52	17	--	--	--	2.2	.86	26	21	.04	.040	<.015	.17
JUL													
08...	.49	19	--	--	--	2.1	.85	28	23	.04	.036	.043	.27
22...	.53	19	--	--	--	2.3	.67	28	24	.04	.036	.027	.26
AUG													
05...	.51	21	--	--	--	2.4	.60	42	26	.06	.029	.030	.29
SEP													
09...	.58	27	--	--	--	2.4	.56	43	30	.06	.014	E.009	.32

Date	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT												
22...	.014	.005	<.007	--	--	--	--	--	--	--	--	--
22...	--	--	--	2.7	<5.0	<2.0	<100	<1.0	<3.0	<.10	<3.0	<.10
NOV												
05...	.017	E.003	<.007	--	--	--	--	--	--	--	--	--
05...	--	--	--	2.4	<5.0	<2.0	<100	<1.0	<3.0	<.10	<3.0	<.10
DEC												
03...	.012	E.003	<.007	--	--	--	--	--	--	--	--	--
03...	--	--	--	2.8	<5.0	<2.0	<100	<1.0	M	<.10	<3.0	<.10
JAN												
07...	.009	.005	E.005	--	--	--	--	--	--	--	--	--
07...	--	--	--	2.6	<5.0	<2	<100	<1	<3	<.10	<3	<.1
FEB												
04...	.010	E.004	<.007	--	--	--	--	--	--	--	--	--
04...	--	--	--	2.6	<5.0	<2	<100	<1	<3	<.10	<3	<.1
MAR												
18...	.020	E.003	<.007	--	--	--	--	--	--	--	--	--
18...	--	--	--	2.6	<1.0	<2	<100	<1	M	<.10	<5	<.1
APR												
15...	.020	E.003	<.007	--	E.2	.6	48	<.08	2.4	<.01	<.06	<1
MAY												
06...	.013	<.004	<.007	--	E.2	.6	32	<.08	3.2	<.01	.11	<1
20...	.017	.004	<.007	--	E.1	.7	37	<.08	1.0	<.01	.21	<1
JUN												
03...	.015	.005	<.007	--	E.1	.8	56	<.08	2.6	<.01	.15	<1
24...	.013	E.004	<.007	--	E.2	.6	38	<.08	1.0	<.01	.08	<1
JUL												
08...	.028	.009	E.004	--	E.2	.7	45	E.05	1.5	<.01	.22	<1
22...	.023	.004	<.007	--	.2	.6	78	<.08	1.9	<.01	.13	<1
AUG												
05...	.021	.009	<.007	--	.3	.6	65	<.08	1.5	<.01	.15	<1
SEP												
09...	.020	E.004	<.007	--	.3	.5	45	<.08	1.7	<.01	.31	<1

E Estimated laboratory analysis value.

M Presence of material verified but not quantified.

BIG THOMPSON PROJECT--Continued

06735500 BIG THOMPSON RIVER NEAR ESTES PARK, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
OCT					
22...	<.4	M	<.4	<.4	<.4
NOV					
05...	<.4	M	<.4	<.4	<.4
DEC					
03...	<.4	<.4	<.4	<.4	<.4
JAN					
07...	<.4	<.4	<.4	<.4	<.4
FEB					
04...	<.4	<.4	<.4	<.4	<.4
MAR					
18...	<.4	<.4	<.4	<.4	<.4
APR					
15...	<.4	<.4	<.4	<.4	<.4
MAY					
06...	<.4	<.4	<.4	<.4	<.4
20...	<.4	<.4	<.4	<.4	<.4
JUN					
03...	<.4	<.4	<.4	<.4	<.4
24...	<.4	<.4	<.4	<.4	<.4
JUL					
08...	<.4	<.4	<.4	<.4	<.4
22...	<.4	<.4	<.4	<.4	<.4
AUG					
05...	<.4	<.4	<.4	<.4	<.4
SEP					
09...	<.4	<.4	<.4	<.4	<.4

E Estimated laboratory analysis value.

M Presence of material verified but not quantified.

BIG THOMPSON PROJECT--Continued

06734900 OLYMPUS TUNNEL AT LAKE ESTES, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°22'30", long 105°29'13", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.29, T.5 N., R.72 W., Larimer County, Hydrologic Unit 10190006, at tunnel entrance at south end of Olympus Dam on Lake Estes, 1.9 mi east of Estes Park.

PERIOD OF RECORD.--September 1970 to present.

REMARKS.--Field data collected prior to 1974 water year available in district office. Records of discharge are estimated values.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	TURBID- ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED AS AS CA (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)
OCT													
22...	1120	e501	43	8.6	8.0	--	--	9.6	--	--	--	--	--
22...	1121	--	--	--	--	1.5	--	--	17	5.20	.98	1.80	.2
DEC													
03...	1230	e496	45	7.8	2.5	--	--	10.5	--	--	--	--	--
03...	1231	--	--	--	--	1.0	--	--	21	6.60	1.20	2.00	.2
JAN													
07...	1205	e549	53	7.3	1.5	--	--	12.7	--	--	--	--	--
07...	1306	--	--	--	--	1.0	--	--	23	7.00	1.30	2.10	.2
FEB													
04...	1245	e506	54	8.3	2.0	--	--	11.1	--	--	--	--	--
04...	1246	--	--	--	--	.80	--	--	24	7.40	1.40	2.40	.2
MAR													
18...	1225	e541	61	7.3	2.5	--	--	8.7	--	--	--	--	--
18...	1226	--	--	--	--	.70	--	--	23	7.00	1.30	2.20	.2
APR													
15...	1230	e363	53	7.9	7.0	--	1.3	9.7	23	7.09	1.29	2.41	.2
MAY													
06...	1300	e455	48	7.7	7.5	--	5.0	9.7	21	6.26	1.23	2.02	.2
20...	1340	e570	46	8.3	10.0	--	2.9	9.3	18	5.54	1.12	1.91	.2
JUN													
03...	1305	e501	35	7.0	10.5	--	2.1	9.2	15	4.39	.883	1.47	.2
24...	1245	e507	37	8.0	15.5	--	1.6	--	14	4.31	.851	1.58	.2
JUL													
08...	1240	e251	42	7.8	18.0	--	1.6	7.2	16	4.82	.943	1.78	.2
22...	1230	e251	44	7.9	19.0	--	2.1	6.9	17	5.26	.999	1.92	.2
AUG													
05...	1245	e553	47	7.9	18.5	--	1.8	6.9	19	5.70	1.12	2.09	.2
SEP													
09...	1220	e256	57	9.1	17.0	--	2.6	7.0	23	6.90	1.29	2.18	.2

Date	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT. DIS FET LAB (MG/L CACO3) (29801)	ALKA- LINITY WAT. DIS TOT FET LAB MG/L AS CACO3 (00421)	BICAR- BONATE WAT. DIS FET LAB (MG/L HCO3) (29805)	CAR- BONATE WAT. DIS FET LAB (MG/L CO3) (29808)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
OCT													
22...	--	--	--	--	--	--	--	--	--	--	--	E.010	E.012
22...	--	--	20	24	<3.0	2.7	.5	24	--	--	--	--	--
DEC													
03...	--	--	--	--	--	--	--	--	--	--	--	<.013	<.015
03...	--	--	20	24	<3.0	2.8	.6	40	--	--	--	--	--
JAN													
07...	--	--	--	--	--	--	--	--	--	--	--	.020	.020
07...	--	--	26	32	<3.0	4.1	1.3	40	--	--	--	--	--
FEB													
04...	--	--	--	--	--	--	--	--	--	--	--	.016	E.014
04...	--	--	23	28	<3.0	3.1	.8	46	--	--	--	--	--
MAR													
18...	--	--	--	--	--	--	--	--	--	--	--	.031	E.012
18...	--	--	30	37	<3.0	4.0	1.4	62	--	--	--	--	--
APR													
15...	.71	25	--	--	--	2.7	.91	38	30	.05	--	<.013	<.015
MAY													
06...	.62	23	--	--	--	2.7	1.02	33	28	.05	41.1	.022	<.015
20...	.74	20	--	--	--	2.5	.64	39	25	.05	60.0	.032	<.015
JUN													
03...	.49	15	--	--	--	2.1	.69	33	20	.04	44.6	.051	<.015
24...	.49	16	--	--	--	2.2	1.14	28	21	.04	38.7	.052	E.009
JUL													
08...	.49	19	--	--	--	2.1	.55	32	22	.04	22.0	.039	.055
22...	.54	19	--	--	--	2.3	1.05	26	24	.04	--	.037	.015
AUG													
05...	.49	21	--	--	--	2.3	.63	38	25	.05	56.8	.034	.047
SEP													
09...	.57	27	--	--	--	2.4	.58	39	30	.05	--	.014	E.012

E Estimated laboratory analysis value.
e Estimated.

BIG THOMPSON PROJECT--Continued

06734900 OLYMPUS TUNNEL AT LAKE ESTES, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT													
22...	.23	.010	<.004	<.007	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	2.7	<5.0	<2.0	<100	<1.0	<3.0	<.10	<3.0	<.10
DEC													
03...	<.10	<.004	<.004	<.007	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	2.8	<5.0	<2.0	<100	<1.0	<3.0	<.10	<3.0	<.10
JAN													
07...	.21	.012	E.004	<.007	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	2.6	<5.0	<2	<100	<1	<3	<.10	<3	<.1
FEB													
04...	.17	.010	E.004	<.007	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	2.6	<5.0	<2	<100	<1	<3	<.10	<3	<.1
MAR													
18...	.16	.012	E.003	<.007	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	2.6	<1.0	<2	<100	<1	<3	<.10	<5	<.1
APR													
15...	.24	.018	E.002	<.007	--	.2	.6	42	<.08	.2	<.01	<.06	<1
MAY													
06...	.17	.013	E.002	<.007	--	E.2	.5	32	<.08	1.8	<.01	.16	<1
20...	.23	.020	E.004	<.007	--	E.1	.7	69	<.08	4.2	<.01	.21	<1
JUN													
03...	.29	.031	.008	<.007	--	E.1	.6	56	<.08	2.2	<.01	.13	<1
24...	.18	.015	.004	<.007	--	E.2	.6	54	<.08	.8	<.01	.07	<1
JUL													
08...	.32	.032	.011	E.006	--	.2	.7	52	E.05	.5	<.01	E.04	<1
22...	.25	.021	.006	<.007	--	.2	.6	67	<.08	.5	<.01	.16	<1
AUG													
05...	.29	.023	.007	<.007	--	.2	.6	86	<.08	2.0	<.01	.16	<1
SEP													
09...	.34	.024	.005	<.007	--	.3	.5	36	<.08	.7	<.01	.32	<1

Date	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
OCT					
22...	<.4	M	<.4	<.4	<.4
DEC					
03...	<.4	<.4	<.4	<.4	<.4
JAN					
07...	<.4	<.4	<.4	<.4	<.4
FEB					
04...	<.4	<.4	<.4	<.4	<.4
MAR					
18...	<.4	<.4	<.4	<.4	<.4
APR					
15...	<.4	<.4	<.4	<.4	<.4
MAY					
06...	<.4	<.4	<.4	<.4	<.4
20...	<.4	<.4	<.4	<.4	<.4
JUN					
03...	<.4	<.4	<.4	<.4	<.4
24...	<.4	<.4	<.4	<.4	<.4
JUL					
08...	<.4	<.4	<.4	<.4	<.4
22...	<.4	<.4	<.4	<.4	<.4
AUG					
05...	<.4	<.4	<.4	<.4	<.4
SEP					
09...	<.4	<.4	<.4	<.4	<.4

E Estimated laboratory analysis value.
M Presence of material verified but not quantified.

PLATTE RIVER BASIN

BIG THOMPSON PROJECT--Continued

402249105282000 BIG THOMPSON RIVER AT WHISPERING PINES NEAR ESTES PARK, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°22'49", long 105°28'00", in SW¹/₄SW¹/₄ sec.21, T.5 N., R.72 W., Larimer County, Hydrologic Unit 10190006, on right bank, immediately downstream of staff gage connected to the Hwy 34 bridge supports, at Whispering Pines.

DRAINAGE AREA.--164 mi².

PERIOD OF RECORD.--August 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	TURBID- ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)
OCT													
22...	1220	121	46	8.8	8.5	--	--	9.5	--	--	--	--	--
22...	1221	--	--	--	--	1.5	--	--	17	5.20	1.00	2.20	.2
NOV													
05...	1225	78	46	7.7	7.5	--	--	9.7	--	--	--	--	--
05...	1256	--	--	--	--	2.0	--	--	18	5.50	1.10	2.20	.2
DEC													
03...	1330	33	56	7.4	4.0	--	--	9.1	--	--	--	--	--
03...	1331	--	--	--	--	1.0	--	--	23	6.90	1.30	3.40	.3
JAN													
07...	1400	22	71	7.3	4.0	--	--	11.0	--	--	--	--	--
07...	1401	--	--	--	--	1.0	--	--	24	7.30	1.40	4.60	.4
FEB													
04...	1345	21	71	7.2	3.0	--	--	10.9	--	--	--	--	--
04...	1346	--	--	--	--	.70	--	--	25	7.60	1.50	4.80	.4
MAR													
18...	1320	21	74	9.5	5.5	--	--	11.2	--	--	--	--	--
18...	1321	--	--	--	--	.85	--	--	24	7.30	1.40	4.20	.4
APR													
15...	1330	32	65	--	9.5	--	1.8	11.4	23	7.00	1.31	3.70	.3
MAY													
06...	1350	57	56	7.6	11.5	--	2.4	8.6	22	6.61	1.28	2.94	.3
21...	1100	189	45	8.5	8.5	--	3.0	9.3	18	5.24	1.07	2.09	.2
JUN													
04...	1055	354	36	7.6	10.5	--	3.7	9.0	14	4.28	.901	1.81	.2
25...	1020	126	42	8.3	17.5	--	1.3	7.9	15	4.67	.913	2.08	.2
JUL													
09...	1020	106	48	8.1	18.5	--	2.6	7.3	17	5.14	1.01	2.37	.3
23...	1025	77	53	8.2	19.5	--	3.1	7.3	17	5.04	1.01	2.96	.3
AUG													
05...	1040	78	57	8.3	19.5	--	2.1	7.2	19	5.88	1.16	3.23	.3
SEP													
10...	1015	43	67	8.7	16.0	--	2.4	7.5	23	6.95	1.35	3.50	.3

BIG THOMPSON PROJECT--Continued

402249105282000 BIG THOMPSON RIVER AT WHISPERING PINES NEAR ESTES PARK, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT.DIS FET LAB (MG/L CACO3) (29801)	ALKA- LINITY WAT.DIS TOT FET LAB MG/L AS CACO3 (00421)	BICAR- BONATE WAT.DIS FET LAB (MG/L HCO3) (29805)	CAR- BONATE WAT.DIS FET LAB (MG/L CO3) (29808)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
OCT													
22...	--	--	--	--	--	--	--	--	--	--	--	.049	<.015
22...	--	--	20	24	<3.0	2.9	.9	22	--	--	--	--	--
NOV													
05...	--	--	--	--	--	--	--	--	--	--	--	.039	<.015
05...	--	--	20	24	<3.0	4.1	.9	170	--	--	--	--	--
DEC													
03...	--	--	--	--	--	--	--	--	--	--	--	.264	.015
03...	--	--	22	27	<3.0	3.6	1.7	50	--	--	--	--	--
JAN													
07...	--	--	--	--	--	--	--	--	--	--	--	.442	.257
07...	--	--	28	34	<3.0	5.1	2.6	46	--	--	--	--	--
FEB													
04...	--	--	--	--	--	--	--	--	--	--	--	.398	.226
04...	--	--	24	230	<3.0	4.0	2.4	42	--	--	--	--	--
MAR													
18...	--	--	--	--	--	--	--	--	--	--	--	.387	.052
18...	--	--	48	37	11	5.0	2.9	68	--	--	--	--	--
APR													
15...	.88	25	--	--	--	3.7	2.09	30	35	.04	2.59	.254	E.008
MAY													
06...	.90	23	--	--	--	3.3	1.44	38	32	.05	5.83	.281	.015
21...	.66	19	--	--	--	2.5	.86	33	25	.05	17.0	.116	<.015
JUN													
04...	.58	15	--	--	--	2.1	1.30	38	21	.05	36.7	.106	<.015
25...	.62	18	--	--	--	2.4	.94	30	23	.04	10.3	.093	.071
JUL													
09...	.61	20	--	--	--	2.3	1.20	34	25	.05	9.73	.113	.142
23...	.85	19	--	--	--	2.7	1.65	31	27	.04	6.46	.264	.138
AUG													
05...	.84	22	--	--	--	3.1	1.65	50	31	.07	10.6	.308	.063
SEP													
10...	.98	26	--	--	--	3.2	1.70	48	36	.07	5.59	.433	.051

Date	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	CARBON, TOTAL (MG/L AS C) (00680)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT													
22...	.23	.050	.034	.029	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	2.8	<5.0	<2.0	<100	<1.0	<3.0	<.10	<3.0	<.10
NOV													
05...	.27	.062	.044	.036	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	2.7	<5.0	<2.0	<100	<1.0	<3.0	<.10	<3.0	<.10
DEC													
03...	.24	.104	.089	.081	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	2.9	<5.0	<2.0	<100	<1.0	M	<.10	<3.0	<.10
JAN													
07...	.57	.167	.163	.148	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	2.9	<5.0	<2	<100	<1	M	<.10	<3	<.1
FEB													
04...	.44	.083	.078	.071	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	2.9	<5.0	<2	<100	<1	<3	<.10	<3	<.1
MAR													
18...	.34	.113	.089	.072	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	3.1	<1.0	<2	<100	<1	<3	<.10	<5	<.1
APR													
15...	.41	.124	.083	.070	--	.2	.8	47	<.08	2.2	<.01	E.04	<1
MAY													
06...	.25	.060	.041	.033	--	.2	.8	37	E.04	4.9	<.01	.23	<1
21...	.28	.041	.019	.010	--	E.1	.8	56	<.08	3.4	<.01	.26	<1
JUN													
04...	.25	.027	.013	E.006	--	E.2	.8	54	E.06	3.2	<.01	.14	<1
25...	.27	.051	.035	.027	--	.2	.7	37	<.08	2.1	<.01	.09	<1
JUL													
09...	.40	.074	.057	.047	--	E.1	.8	41	<.08	2.6	<.01	.25	<1
23...	.38	.096	.079	.063	--	.2	.7	74	E.06	2.5	<.01	.17	<1
AUG													
05...	.34	.162	.144	.127	--	.3	.7	62	E.07	2.8	<.01	.20	<1
SEP													
10...	.45	.180	.146	.132	--	.3	.6	34	E.06	3.1	<.01	.35	<1

E Estimated laboratory analysis value.
M Presence of material verified but not quantified.

PLATTE RIVER BASIN

BIG THOMPSON PROJECT--Continued

402249105282000 BIG THOMPSON RIVER AT WHISPERING PINES NEAR ESTES PARK, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
OCT					
22...	<.4	M	<.4	<.4	<.4
NOV					
05...	<.4	M	<.4	<.4	<.4
DEC					
03...	<.4	<.4	<.4	<.4	<.4
JAN					
07...	<.4	<.4	<.4	<.4	<.4
FEB					
04...	<.4	<.4	<.4	<.4	<.4
MAR					
18...	<.4	<.4	<.4	<.4	<.4
APR					
15...	<.4	<.4	<.4	<.4	<.4
MAY					
06...	<.4	<.4	<.4	<.4	<.4
21...	<.4	<.4	<.4	<.4	<.4
JUN					
04...	<.4	<.4	<.4	<.4	<.4
05...	<.4	<.4	<.4	<.4	<.4
JUL					
09...	<.4	<.4	<.4	<.4	<.4
23...	<.4	<.4	<.4	<.4	<.4
AUG					
06...	<.4	<.4	<.4	<.4	<.4
SEP					
10...	<.4	<.4	<.4	<.4	<.4

M Presence of material verified but not quantified.

BIG THOMPSON PROJECT--Continued

402554105202100 BIG THOMPSON RIVER ABOVE NORTH FORK BIG THOMPSON RIVER AT DRAKE, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°25'54", long 105°20'21", (unsurveyed), Larimer County, Hydrologic Unit 10190006, approximately 100 ft upstream of unnamed bridge on dead end road off Hwy 34, 400 ft upstream of inflow of North Fork Big Thompson River, in Drake.

DRAINAGE AREA.--191 mi².

PERIOD OF RECORD.--August 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L) AS CACO3 (00900)	CALCIUM DIS-SOLVED (MG/L) AS CA (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) AS MG (00925)	SODIUM, DIS-SOLVED (MG/L) AS NA (00930)	SODIUM AD-SORP-TION RATIO (00931)
OCT													
23...	1020	123	45	7.3	6.5	--	--	10.0	--	--	--	--	--
23...	1021	--	--	--	--	2.0	--	--	18	5.40	1.10	2.30	.2
NOV													
06...	0935	71	46	7.1	5.0	--	--	10.3	--	--	--	--	--
06...	0936	--	--	--	--	1.0	--	--	19	5.70	1.10	2.30	.2
DEC													
04...	1015	24	61	6.9	.0	--	--	13.5	--	--	--	--	--
04...	1016	--	--	--	--	.95	--	--	24	7.20	1.40	3.80	.3
JAN													
08...	1035	25	71	7.6	.5	--	--	12.2	--	--	--	--	--
08...	1036	--	--	--	--	2.0	--	--	24	7.30	1.40	4.70	.4
FEB													
05...	1045	21	74	7.0	.5	--	--	14.0	--	--	--	--	--
05...	1046	--	--	--	--	1.5	--	--	26	7.90	1.50	4.90	.4
MAR													
19...	1040	27	73	8.3	.0	--	--	11.9	--	--	--	--	--
19...	1041	--	--	--	--	1.2	--	--	24	7.50	1.40	4.40	.4
APR													
16...	1020	44	79	8.4	7.5	--	6.0	9.5	30	9.25	1.71	4.34	.3
MAY													
07...	1105	66	56	7.8	9.0	--	2.7	10.6	22	6.64	1.30	2.92	.3
21...	1230	182	50	8.5	12.0	--	4.6	9.8	19	5.69	1.13	2.35	.2
JUN													
04...	1305	434	37	7.6	12.0	--	3.2	8.8	15	4.38	.900	1.90	.2
25...	1150	126	47	8.0	17.0	--	1.3	7.6	16	4.88	.954	2.42	.3
JUL													
09...	1135	101	52	8.1	19.0	--	1.9	7.5	18	5.45	1.07	2.79	.3
23...	1145	84	53	8.1	19.5	--	2.8	7.4	18	5.30	1.06	2.97	.3
AUG													
06...	1145	82	57	8.1	19.0	--	3.6	7.4	21	6.14	1.26	3.43	.3
SEP													
10...	1150	49	67	8.3	15.5	--	1.1	8.1	24	7.21	1.40	3.61	.3

PLATTE RIVER BASIN

BIG THOMPSON PROJECT--Continued

402554105202100 BIG THOMPSON RIVER ABOVE NORTH FORK BIG THOMPSON RIVER AT DRAKE, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT.DIS FET LAB (MG/L CACO3) (29801)	ALKA- LINITY WAT.DIS TOT FET LAB (MG/L AS CACO3) (00421)	BICAR- BONATE WAT.DIS FET LAB (MG/L HCO3) (29805)	CAR- BONATE WAT.DIS FET LAB (MG/L CO3) (29808)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
OCT													
23...	--	--	--	--	--	--	--	--	--	--	--	<.013	<.015
23...	--	--	20	24	<3.0	2.8	.9	24	--	--	--	--	--
NOV													
06...	--	--	--	--	--	--	--	--	--	--	--	<.013	<.015
06...	--	--	20	24	<3.0	4.0	1.0	120	--	--	--	--	--
DEC													
04...	--	--	--	--	--	--	--	--	--	--	--	.369	.035
04...	--	--	26	32	<3.0	3.8	2.2	50	--	--	--	--	--
JAN													
08...	--	--	--	--	--	--	--	--	--	--	--	.533	.200
08...	--	--	27	33	<3.0	5.1	2.9	42	--	--	--	--	--
FEB													
05...	--	--	--	--	--	--	--	--	--	--	--	.533	.160
05...	--	--	24	29	<3.0	4.1	2.7	50	--	--	--	--	--
MAR													
19...	--	--	--	--	--	--	--	--	--	--	--	.351	<.015
19...	--	--	41	50	<3.0	5.0	3.6	70	--	--	--	--	--
APR													
16...	1.11	33	--	--	--	3.9	2.7	38	44	.05	4.51	.261	<.015
MAY													
07...	.77	24	--	--	--	3.1	1.70	39	31	.05	6.96	.089	<.015
21...	.74	22	--	--	--	2.8	1.20	38	27	.05	18.9	.047	<.015
JUN													
04...	.55	15	--	--	--	2.1	1.30	31	21	.04	36.0	.053	<.015
25...	.66	19	--	--	--	2.6	1.28	29	24	.04	9.98	.069	<.015
JUL													
09...	.72	20	--	--	--	2.6	1.44	36	28	.05	9.87	.289	.094
23...	.85	20	--	--	--	2.7	1.76	33	28	.04	7.36	.360	.032
AUG													
06...	.88	23	--	--	--	3.1	1.89	41	32	.06	9.07	.363	.016
SEP													
10...	.89	27	--	--	--	3.0	2.12	48	37	.06	6.34	.546	<.015
Date	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	CARBON, TOTAL (MG/L AS C) (00680)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT													
23...	.27	.033	.010	E.006	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	2.8	<5.0	<2.0	<100	<1.0	<3.0	<.10	<3.0	<.10
NOV													
06...	.28	.036	.022	.009	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	2.6	<5.0	<2.0	<100	<1.0	<3.0	<.10	<3.0	<.10
DEC													
04...	.27	.107	.093	.082	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	2.9	<5.0	<2.0	<100	<1.0	<3.0	<.10	<3.0	<.10
JAN													
08...	.54	.149	.130	.120	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	2.7	<5.0	<2	<100	<1	<3	<.10	<3	<.1
FEB													
05...	.33	.076	.064	.059	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	2.6	<5.0	<2	<100	<1	<3	<.10	<3	<.1
MAR													
19...	.25	.067	.051	.038	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	2.9	<1.0	<2	<100	<1	<3	<.10	<5	<.1
APR													
16...	.67	.150	.033	.021	--	.2	M	40	<.08	14	<.01	M	<.1
MAY													
07...	.35	.060	.024	.014	--	E.1	.8	29	<.08	4.6	<.01	.12	<.1
21...	.46	.074	.019	.010	--	E.1	1.2	43	E.07	3.9	<.01	.22	<.1
JUN													
04...	.23	.015	.005	<.007	--	E.2	.8	43	E.04	2.3	<.01	.13	<.1
25...	.23	.051	.032	.023	--	.2	.7	30	<.08	2.3	<.01	.09	<.1
JUL													
09...	.44	.092	.070	.058	--	E.1	.9	31	<.08	3.7	<.01	.29	<.1
23...	.32	.106	.084	.070	--	.2	.8	47	E.04	2.8	<.01	.18	<.1
AUG													
06...	.31	.167	.138	.125	--	.2	.8	44	<.08	2.9	<.01	.22	<.1
SEP													
10...	.35	.130	.098	.085	--	.3	.7	26	E.05	2.9	E.01	.40	<.1

E Estimated laboratory analysis value.

M Presence of material verified but not quantified.

BIG THOMPSON PROJECT--Continued

402554105202100 BIG THOMPSON RIVER ABOVE NORTH FORK BIG THOMPSON RIVER AT DRAKE, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
OCT					
23...	<.4	M	<.4	<.4	<.4
NOV					
06...	<.4	M	<.4	<.4	<.4
DEC					
04...	<.4	<.4	<.4	<.4	<.4
JAN					
08...	<.4	<.4	<.4	<.4	<.4
FEB					
05...	<.4	<.4	<.4	<.4	<.4
MAR					
19...	<.4	<.4	<.4	<.4	<.4
APR					
16...	<.4	<.4	<.4	<.4	<.4
MAY					
07...	<.4	<.4	<.4	<.4	<.4
21...	<.4	<.4	<.4	<.4	<.4
JUN					
04...	<.4	<.4	<.4	<.4	<.4
25...	<.4	<.4	<.4	<.4	<.4
JUL					
09...	<.4	<.4	<.4	<.4	<.4
23...	<.4	<.4	<.4	<.4	<.4
AUG					
06...	<.4	<.4	<.4	<.4	<.4
SEP					
10...	<.4	<.4	<.4	<.4	<.4

M Presence of material verified but not quantified.

BIG THOMPSON PROJECT--Continued

06736000 NORTH FORK BIG THOMPSON RIVER AT DRAKE, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°25'59", long 105°20'18", (unsurveyed), Larimer County, Hydrologic Unit 10190006, on right bank 400 ft upstream from mouth and 300 ft upstream from Hwy 34 bridge at Drake.

DRAINAGE AREA.--85.1 mi²

PERIOD OF RECORD.--August 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	TURBID- ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)
OCT													
23...	1110	8.2	34	7.7	6.5	--	--	9.7	--	--	--	--	--
23...	1111	--	--	--	--	.55	--	--	11	3.30	.77	2.50	.3
NOV													
05...	1345	9.4	34	8.1	7.5	--	--	10.4	--	--	--	--	--
05...	1346	--	--	--	--	.50	--	--	12	3.40	.81	2.40	.3
DEC													
04...	1120	7.9	36	7.2	.0	--	--	14.6	--	--	--	--	--
04...	1121	--	--	--	--	.60	--	--	14	4.00	.89	2.90	.3
JAN													
08...	1135	5.5	40	7.1	.5	--	--	12.4	--	--	--	--	--
08...	1136	--	--	--	--	.70	--	--	14	3.90	.92	3.30	.4
FEB													
05...	1215	3.1	42	7.7	.5	--	--	12.2	--	--	--	--	--
05...	1216	--	--	--	--	.65	--	--	15	4.20	1.10	3.40	.4
MAR													
19...	1145	8.0	45	8.3	1.0	--	--	11.4	--	--	--	--	--
19...	1146	--	--	--	--	.35	--	--	14	4.00	.96	3.30	.4
APR													
16...	1230	e8.2	44	7.8	10.0	--	1.0	9.0	15	4.31	1.00	3.35	.4
MAY													
07...	1225	8.8	42	8.0	14.0	--	4.4	7.9	14	4.06	.983	3.17	.4
21...	1330	e14	34	8.2	13.5	--	3.4	7.9	11	3.29	.776	2.54	.3
JUN													
05...	0850	38	32	7.2	8.5	--	2.9	9.5	11	3.18	.719	2.20	.3
25...	1300	22	28	7.7	16.5	--	1.3	7.8	9	2.64	.573	1.84	.3
JUL													
09...	1250	e14	29	7.7	20.5	--	1.8	7.2	9	2.69	.583	1.85	.3
23...	1300	13	29	7.7	19.5	--	4.6	7.1	10	3.01	.653	2.07	.3
AUG													
06...	1315	e16	30	7.9	20.0	--	3.3	7.2	10	2.93	.685	2.21	.3
SEP													
10...	1320	e11	36	8.0	15.5	--	2.2	7.9	12	3.28	.806	2.34	.3

e Estimated.

BIG THOMPSON PROJECT--Continued

06736000 NORTH FORK BIG THOMPSON RIVER AT DRAKE, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT.DIS FET LAB (MG/L CACO3) (29801)	ALKA- LINITY WAT.DIS TOT FET LAB (MG/L AS CACO3) (00421)	BICAR- BONATE WAT.DIS FET LAB (MG/L HCO3) (29805)	CAR- BONATE WAT.DIS FET LAB (MG/L CO3) (29808)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
OCT													
23...	--	--	--	--	--	--	--	--	--	--	--	.023	<.015
23...	--	--	10	12	<3.0	2.4	.6	20	--	--	--	--	--
NOV													
05...	--	--	--	--	--	--	--	--	--	--	--	.035	<.015
05...	--	--	14	17	<3.0	3.5	.6	84	--	--	--	--	--
DEC													
04...	--	--	--	--	--	--	--	--	--	--	--	.114	<.015
04...	--	--	18	22	<3.0	2.6	.8	40	--	--	--	--	--
JAN													
08...	--	--	--	--	--	--	--	--	--	--	--	.173	<.015
08...	--	--	15	18	<3.0	3.9	2.0	34	--	--	--	--	--
FEB													
05...	--	--	--	--	--	--	--	--	--	--	--	.175	<.015
05...	--	--	14	17	<3.0	2.9	1.2	24	--	--	--	--	--
MAR													
19...	--	--	--	--	--	--	--	--	--	--	--	.102	<.015
19...	--	--	18	22	<3.0	4.1	2.4	54	--	--	--	--	--
APR													
16...	.50	18	--	--	--	3.0	2.51	38	25	.05	--	<.013	<.015
MAY													
07...	.58	18	--	--	--	2.6	1.84	31	24	.04	.74	<.013	<.015
21...	.57	14	--	--	--	2.1	1.49	30	20	.04	--	<.013	<.015
JUN													
05...	.55	13	--	--	--	2.0	1.29	36	18	.05	3.64	.071	<.015
25...	.42	12	--	--	--	1.6	.60	27	15	.04	1.58	.065	<.015
JUL													
09...	.39	12	--	--	--	1.5	.80	11	16	.02	--	.081	E.010
23...	.48	13	--	--	--	1.4	.79	24	17	.03	.83	.070	E.009
AUG													
06...	.51	13	--	--	--	1.6	.77	34	17	.05	--	.094	<.015
SEP													
10...	.63	15	--	--	--	1.4	1.41	29	19	.04	--	.072	<.015

Date	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	CARBON, TOTAL (MG/L AS C) (00680)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT													
23...	.11	.005	E.002	<.007	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	1.8	<5.0	<2.0	<100	<1.0	M	<.10	<3.0	<.10
NOV													
05...	E.09	.006	E.004	<.007	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	1.5	<5.0	<2.0	<100	<1.0	M	<.10	<3.0	<.10
DEC													
04...	E.10	.012	E.004	<.007	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	1.5	<5.0	<2.0	<100	<1.0	M	<.10	<3.0	<.10
JAN													
08...	.11	.006	E.004	<.007	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	1.3	<5.0	<2	<100	<1	M	<.10	<3	<.1
FEB													
05...	E.06	.005	<.004	<.007	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	1.3	<5.0	<2	<100	<1	M	<.10	<3	<.1
MAR													
19...	.13	.010	E.004	<.007	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	1.5	<1.0	<2	<100	<1	M	<.10	<5	<.1
APR													
16...	.18	.012	.005	<.007	--	E.1	1.1	67	<.08	3.6	<.01	<.06	<1
MAY													
07...	.16	.016	.006	<.007	--	<.2	.6	65	<.08	4.2	<.01	.08	<1
21...	.24	.029	.008	<.007	--	<.2	.7	51	<.08	3.8	<.01	.17	<1
JUN													
05...	.25	.019	.006	<.007	--	<.2	.7	57	E.07	2.9	<.01	.15	<1
25...	.14	.015	.006	<.007	--	E.1	.5	45	<.08	2.9	<.01	E.06	<1
JUL													
09...	.20	.018	.009	E.005	--	<.2	.6	56	E.06	3.7	<.01	.15	<1
23...	.15	.016	.009	E.004	--	E.1	.5	72	<.08	3.9	<.01	.09	<1
AUG													
06...	.21	.023	.009	<.007	--	E.1	1.9	64	.14	3.4	<.01	.11	<1
SEP													
10...	.17	.021	.008	<.007	--	E.1	.5	83	E.07	4.7	<.01	.19	<1

E Estimated laboratory analysis value.
M Presence of material verified but not quantified.

PLATTE RIVER BASIN

BIG THOMPSON PROJECT--Continued

06736000 NORTH FORK BIG THOMPSON RIVER AT DRAKE, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
OCT 23...	<.4	M	<.4	<.4	<.4
NOV 05...	<.4	M	<.4	<.4	<.4
DEC 04...	<.4	<.4	<.4	<.4	<.4
JAN 08...	<.4	<.4	<.4	<.4	<.4
FEB 05...	<.4	<.4	<.4	<.4	<.4
MAR 19...	<.4	<.4	<.4	<.4	<.4
APR 16...	<.4	<.4	<.4	<.4	<.4
MAY 07...	<.4	<.4	<.4	<.4	<.4
21...	<.4	<.4	<.4	<.4	<.4
JUN 05...	<.4	<.4	<.4	<.4	<.4
05...	<.4	<.4	<.4	<.4	<.4
JUL 09...	<.4	<.4	<.4	<.4	<.4
23...	<.4	<.4	<.4	<.4	<.4
AUG 06...	<.4	<.4	<.4	<.4	<.4
SEP 10...	<.4	<.4	<.4	<.4	<.4

M Presence of material verified but not quantified.

BIG THOMPSON PROJECT--Continued

06736700 BIG THOMPSON RIVER ABOVE DILLIE TUNNEL NEAR DRAKE, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°24'54", long 105°15'00", in SE¹/₄NE¹/₄ sec.8, T.5 N., R.70 W., Larimer County, Hydrologic Unit 10190006, approximately 250 ft upstream of Hwy 34 bridge, approximately 1 mi downstream of inflow of Cedar Creek, 1 mi east of Cedar Cove.

DRAINAGE AREA.--305 mi².

PERIOD OF RECORD.--August 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L) AS CACO3 (00900)	CALCIUM DIS-SOLVED (MG/L) AS CA (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) AS MG (00925)	SODIUM, DIS-SOLVED (MG/L) AS NA (00930)	SODIUM AD-SORP-TION RATIO (00931)
OCT													
23...	1220	143	46	7.1	7.5	--	--	9.7	--	--	--	--	--
23...	1221	--	--	--	--	1.5	--	--	17	5.20	1.00	2.30	.2
NOV													
06...	1045	89	47	7.2	7.0	--	--	10.1	--	--	--	--	--
06...	1046	--	--	--	--	.90	--	--	19	5.80	1.20	2.40	.2
DEC													
04...	1305	28	56	7.5	.5	--	--	12.4	--	--	--	--	--
04...	1306	--	--	--	--	1.0	--	--	22	6.60	1.30	3.50	.3
JAN													
08...	1315	33	64	7.4	.0	--	--	12.4	--	--	--	--	--
08...	1316	--	--	--	--	2.0	--	--	22	6.80	1.30	4.20	.4
FEB													
05...	1345	27	69	7.1	.5	--	--	13.9	--	--	--	--	--
05...	1346	--	--	--	--	1.5	--	--	25	7.50	1.50	4.60	.4
MAR													
19...	1300	27	76	8.8	4.0	--	--	11.6	--	--	--	--	--
19...	1301	--	--	--	--	.90	--	--	25	7.40	1.50	4.50	.4
APR													
16...	1330	54	63	8.2	11.5	--	1.5	9.0	23	7.14	1.34	4.43	.4
MAY													
07...	1350	68	60	8.8	14.0	--	2.8	9.1	22	6.55	1.33	3.26	.3
22...	0910	315	47	7.3	8.0	--	11	9.7	18	5.26	1.10	2.27	.2
JUN													
05...	1005	217	40	7.7	11.5	--	3.3	9.8	15	4.51	.945	2.32	.3
26...	0930	153	45	7.7	16.0	--	1.9	9.2	16	4.68	.948	2.32	.3
JUL													
10...	0900	130	49	7.9	17.5	--	2.4	8.0	17	5.11	1.02	2.59	.3
24...	0850	106	47	7.8	17.0	--	4.9	7.9	17	5.12	1.04	2.87	.3
AUG													
07...	1005	115	57	8.1	17.5	--	4.7	7.9	20	5.92	1.27	3.36	.3
SEP													
11...	0840	61	61	8.1	14.5	--	2.6	8.2	20	5.95	1.22	3.43	.3

PLATTE RIVER BASIN

BIG THOMPSON PROJECT--Continued

06736700 BIG THOMPSON RIVER ABOVE DILLIE TUNNEL NEAR DRAKE, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT.DIS FET LAB (MG/L CACO3) (29801)	ALKA- LINITY WAT DIS TOT FET LAB MG/L AS CACO3 (00421)	CAR- BONATE WAT.DIS FET LAB (MG/L CO3) (29808)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT													
23...	--	--	--	--	--	--	--	--	--	--	<.013	<.015	.22
23...	--	--	20	<3.0	2.8	1.0	20	--	--	--	--	--	--
NOV													
06...	--	--	--	--	--	--	--	--	--	--	<.013	<.015	.21
06...	--	--	22	<3.0	4.1	1.0	120	--	--	--	--	--	--
DEC													
04...	--	--	--	--	--	--	--	--	--	--	.330	.032	.26
04...	--	--	24	<3.0	3.5	2.0	46	--	--	--	--	--	--
JAN													
08...	--	--	--	--	--	--	--	--	--	--	.439	.142	.39
08...	--	--	25	<3.0	4.8	2.7	50	--	--	--	--	--	--
FEB													
05...	--	--	--	--	--	--	--	--	--	--	.487	.127	.30
05...	--	--	23	<3.0	3.9	2.5	38	--	--	--	--	--	--
MAR													
19...	--	--	--	--	--	--	--	--	--	--	.303	<.015	.25
19...	--	--	47	<3.0	5.0	3.9	64	--	--	--	--	--	--
APR													
16...	.88	25	--	--	4.0	3.61	42	37	.06	6.12	.072	E.014	.45
MAY													
07...	.85	24	--	--	3.3	1.98	39	32	.05	7.07	.047	E.010	.32
22...	.72	20	--	--	2.5	1.23	38	26	.05	32.0	.092	E.010	--
JUN													
05...	.62	16	--	--	2.4	1.58	34	23	.05	20.0	.092	E.008	.32
26...	.65	18	--	--	2.4	1.21	31	24	.04	12.7	.154	E.012	.20
JUL													
10...	.69	19	--	--	2.3	1.43	31	26	.04	11.0	.317	.041	.33
24...	.90	19	--	--	2.5	1.69	31	27	.04	8.74	.359	E.013	.31
AUG													
07...	.94	21	--	--	2.9	2.15	46	31	.06	14.4	.377	<.015	.31
SEP													
11...	.86	24	--	--	2.7	1.99	44	32	.06	7.30	.265	E.012	.32

Date	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT												
23...	.031	.011	.008	--	--	--	--	--	--	--	--	--
23...	--	--	--	2.9	<5.0	<2.0	<100	<1.0	<3.0	<.10	<3.0	<.10
NOV												
06...	.030	.016	.011	--	--	--	--	--	--	--	--	--
06...	--	--	--	2.4	<5.0	<2.0	<100	<1.0	<3.0	<.10	<3.0	<.10
DEC												
04...	.083	.067	.058	--	--	--	--	--	--	--	--	--
04...	--	--	--	2.4	<5.0	<2.0	<100	<1.0	M	<.10	<3.0	<.10
JAN												
08...	.098	.082	.076	--	--	--	--	--	--	--	--	--
08...	--	--	--	2.4	<5.0	<2	<100	<1	<3	<.10	<3	<.1
FEB												
05...	.056	.043	.039	--	--	--	--	--	--	--	--	--
05...	--	--	--	2.4	<5.0	<2	<100	<1	<3	<.10	<3	<.1
MAR												
19...	.037	.022	.014	--	--	--	--	--	--	--	--	--
19...	--	--	--	2.5	<1.0	<2	<100	<1	<3	<.10	<5	<.1
APR												
16...	.081	.040	.026	--	.2	1.0	55	<.08	7.5	<.01	.10	<1
MAY												
07...	.050	.024	.017	--	E.1	.9	41	<.08	4.3	<.01	.20	<1
22...	.119	.017	.008	--	E.1	.7	56	E.07	9.6	<.01	.23	<1
JUN												
05...	.036	.012	E.006	--	E.1	.8	46	E.04	3.8	<.01	.15	<1
26...	.044	.026	.018	--	E.2	.7	37	<.08	3.4	<.01	.10	<1
JUL												
10...	.079	.059	.049	--	.2	.9	42	E.06	4.0	<.01	1.26	<1
24...	.085	.063	.050	--	.2	.7	57	E.05	3.3	<.01	.15	<1
AUG												
07...	.155	.125	.110	--	.2	.8	57	.08	3.7	<.01	.20	<1
SEP												
11...	.123	.095	.080	--	.3	.8	51	.08	4.4	<.01	.34	<1

E Estimated laboratory analysis value.

M Presence of material verified but not quantified.

BIG THOMPSON PROJECT--Continued

06736700 BIG THOMPSON RIVER ABOVE DILLIE TUNNEL NEAR DRAKE, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
OCT					
23...	<.4	M	<.4	<.4	<.4
NOV					
06...	<.4	M	<.4	<.4	<.4
DEC					
04...	<.4	<.4	<.4	<.4	<.4
JAN					
07...	<.4	<.4	<.4	<.4	<.4
FEB					
05...	<.4	<.4	<.4	<.4	<.4
MAR					
19...	<.4	<.4	<.4	<.4	<.4
APR					
16...	<.4	<.4	<.4	<.4	<.4
MAY					
07...	<.4	<.4	<.4	<.4	<.4
22...	<.4	<.4	<.4	<.4	<.4
JUN					
05...	<.4	<.4	<.4	<.4	<.4
26...	<.4	<.4	<.4	<.4	<.4
JUL					
10...	<.4	<.4	<.4	<.4	<.4
24...	<.4	<.4	<.4	<.4	<.4
AUG					
07...	<.4	<.4	<.4	<.4	<.4
SEP					
11...	<.4	<.4	<.4	<.4	<.4

M Presence of material verified but not quantified.

PLATTE RIVER BASIN

BIG THOMPSON PROJECT--Continued

402227105134700 HANSEN CANAL BELOW FLATIRON RESERVOIR NEAR LOVELAND, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°22'27", long 105°13'47", in NW¹/₄NW¹/₄ sec.27, T.5 N., R.70 W., Larimer County, Hydrologic Unit 10190006, at siphon entrance at north end of Flatiron Reservoir, 10 mi southwest of Loveland.

PERIOD OF RECORD.--August 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD WATER UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL AS (MG/L) CACO3 (00900)	CALCIUM DIS-SOLVED (MG/L) AS CA (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) AS MG (00925)	SODIUM, DIS-SOLVED (MG/L) AS NA (00930)	SODIUM AD-SORP-TION RATIO (00931)
OCT													
25...	1015	482	41	8.2	7.0	--	--	10.5	--	--	--	--	--
25...	1016	--	--	--	--	2.0	--	--	17	5.20	.98	1.70	.2
DEC													
06...	1135	21	45	7.6	2.5	--	--	11.3	--	--	--	--	--
06...	1136	--	--	--	--	3.0	--	--	21	6.50	1.20	1.90	.2
JAN													
10...	1200	100	54	7.8	2.5	--	--	11.9	--	--	--	--	--
10...	1201	--	--	--	--	1.0	--	--	23	7.20	1.30	2.20	.2
FEB													
07...	1110	107	55	8.1	2.5	--	--	12.0	--	--	--	--	--
07...	1111	--	--	--	--	1.5	--	--	23	6.90	1.30	2.10	.2
APR													
18...	1035	400	54	7.9	8.5	--	5.1	10.0	23	6.92	1.32	2.37	.2
MAY													
09...	0900	204	50	7.5	9.0	--	5.3	9.8	20	6.20	1.19	2.06	.2
23...	1220	494	45	8.0	11.0	--	3.8	9.8	19	5.64	1.13	1.86	.2
JUN													
06...	1300	485	35	7.4	12.5	--	2.1	9.7	15	4.36	.902	1.54	.2
27...	1105	154	38	8.0	18.0	--	1.7	8.1	15	4.56	.879	1.61	.2
JUL													
11...	1040	204	46	8.1	19.5	--	1.9	8.0	18	5.37	1.03	1.87	.2
25...	1115	167	45	7.8	20.5	--	2.5	7.2	18	5.45	1.04	1.92	.2
AUG													
08...	1400	498	50	7.7	19.5	--	2.8	7.5	20	6.09	1.18	2.17	.2
SEP													
12...	1210	24	58	8.3	18.0	--	2.0	--	23	6.91	1.28	2.21	.2

Date	POTAS-SIUM, DIS-SOLVED (MG/L) AS K (00935)	ALKA-LINITY WAT.DIS FET LAB (MG/L) CACO3 (29801)	ALKA-LINITY WAT.DIS TOT FET LAB (MG/L) AS CACO3 (00421)	BICAR-BONATE WAT.DIS FET LAB (MG/L) HCO3 (29805)	CAR-BONATE WAT.DIS FET LAB (MG/L) CO3 (29808)	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	CHLO-RIDE, DIS-SOLVED (MG/L) AS CL (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS) PER AC-FT (70303)	SOLIDS, DIS-SOLVED (TONS) PER DAY (70302)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)
OCT													
25...	--	--	--	--	--	--	--	--	--	--	--	E.010	<.015
25...	--	--	20	24	--	2.6	.7	42	--	--	--	--	--
DEC													
06...	--	--	--	--	--	--	--	--	--	--	--	.027	<.015
06...	--	--	22	27	<3.0	2.8	.5	36	--	--	--	--	--
JAN													
10...	--	--	--	--	--	--	--	--	--	--	--	.024	E.010
10...	--	--	26	32	<3.0	4.1	1.3	38	--	--	--	--	--
FEB													
07...	--	--	--	--	--	--	--	--	--	--	--	.017	<.015
07...	--	--	27	33	<3.0	3.1	.8	44	--	--	--	--	--
APR													
18...	.73	25	--	--	--	3.1	1.0	34	31	.05	36.3	<.013	<.015
MAY													
09...	.75	23	--	--	--	2.7	.72	35	28	.05	19.3	E.011	<.015
23...	.58	21	--	--	--	2.5	.62	34	25	.05	44.8	.016	<.015
JUN													
06...	.58	16	--	--	--	2.2	.70	36	20	.05	46.6	.037	<.015
27...	.49	17	--	--	--	2.1	.49	25	21	.03	10.5	.027	<.015
JUL													
11...	.50	20	--	--	--	2.2	.53	32	24	.04	17.5	.019	<.015
25...	.54	20	--	--	--	2.2	.88	27	24	.04	12.0	.022	E.010
AUG													
08...	.56	23	--	--	--	2.4	.76	42	27	.06	56.8	.038	.035
SEP													
12...	.59	27	--	--	--	2.4	.60	43	30	.06	2.76	.024	.029

E Estimated laboratory analysis value.

BIG THOMPSON PROJECT--Continued

402227105134700 HANSEN CANAL BELOW FLATIRON RESERVOIR NEAR LOVELAND, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT 25...	.22	.018	.006	<.007	--	--	--	--	--	--	--	--	--
OCT 25...	--	--	--	--	2.9	<5.0	<2.0	<100	<1.0	<3.0	<.10	<3.0	<.10
DEC 06...	.21	.013	E.004	<.007	--	--	--	--	--	--	--	--	--
DEC 06...	--	--	--	--	3.0	<5.0	<2.0	<100	<1.0	<3.0	<.10	<3.0	<.10
JAN 10...	.19	.010	.005	<.007	--	--	--	--	--	--	--	--	--
JAN 10...	--	--	--	--	2.9	<5.0	<2	<100	<1	<3	<.10	<3	<.1
FEB 07...	.18	.009	<.004	<.007	--	--	--	--	--	--	--	--	--
FEB 07...	--	--	--	--	2.6	<5.0	<2	<100	<1	<3	<.10	<3	<.1
APR 18...	.23	.021	.005	<.007	--	<.2	M	30	M	M	<.01	M	<1
MAY 09...	.21	.016	E.004	<.007	--	E.1	1.3	28	<.08	1.7	<.01	.18	<1
MAY 23...	.23	.019	E.004	<.007	--	E.1	4.5	43	<.08	1.7	<.01	.25	<1
JUN 06...	.23	.018	E.004	<.007	--	E.1	6.6	42	<.08	2.6	<.01	.24	<1
JUN 27...	.18	.015	E.003	<.007	--	.2	2.1	23	E.05	.7	E.01	.08	<1
JUL 11...	.22	.021	E.004	<.007	--	E.1	2.2	24	<.08	.7	<.01	.23	<1
JUL 25...	.27	.019	.004	<.007	--	.2	2.0	26	<.08	.7	<.01	.15	<1
AUG 08...	.29	.024	.010	<.007	--	.2	13.3	61	E.05	4.0	<.01	.16	<1
SEP 12...	.29	.020	.007	<.007	--	.4	1.7	22	E.07	2.2	<.01	.34	<1

Date	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
OCT 25...	<.4	M	<.4	<.4	<.4
DEC 06...	<.4	<.4	<.4	<.4	<.4
JAN 10...	<.4	<.4	<.4	<.4	<.4
FEB 07...	<.4	<.4	<.4	<.4	<.4
APR 18...	<.4	<.4	<.4	<.4	<.4
MAY 09...	<.4	<.4	<.4	<.4	<.4
MAY 23...	<.4	<.4	<.4	<.4	<.4
JUN 06...	<.4	<.4	<.4	<.4	<.4
JUN 27...	<.4	<.4	<.4	<.4	<.4
JUL 11...	<.4	<.4	<.4	<.4	<.4
JUL 25...	<.4	<.4	<.4	<.4	<.4
AUG 08...	<.4	<.4	<.4	<.4	<.4
SEP 12...	<.4	<.4	<.4	<.4	<.4

E Estimated laboratory analysis value.
M Presence of material verified but not quantified.

PLATTE RIVER BASIN

BIG THOMPSON PROJECT--Continued

402524105133300 HANSEN CANAL BELOW TRIFURCATION NEAR LOVELAND, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°25'24", long 105°13'33", in SW¹/₄SW¹/₄ sec.3, T.5 N., R.70 W., Larimer County, Hydrologic Unit 10190006, at gage 1.1 mi from Hwy 34, 8.6 mi west of Loveland.

PERIOD OF RECORD.--August 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD WATER UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL AS (MG/L) (00900)	CALCIUM DIS-SOLVED (MG/L) AS CA (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) AS MG (00925)	SODIUM, DIS-SOLVED (MG/L) AS NA (00930)	SODIUM AD-SORP-TION RATIO (00931)
OCT													
25...	1120	e493	41	7.9	7.5	--	--	10.4	--	--	--	--	--
25...	1121	--	--	--	--	2.0	--	--	17	5.20	.97	1.70	.2
NOV													
08...	0915	e16	49	6.9	5.5	--	--	10.0	--	--	--	--	--
08...	0916	--	--	--	--	1.0	--	--	21	6.50	1.20	2.20	.2
DEC													
06...	1250	e28	46	7.3	3.5	--	--	11.3	--	--	--	--	--
06...	1251	--	--	--	--	2.0	--	--	21	6.40	1.10	1.90	.2
JAN													
10...	1345	e116	53	7.4	3.0	--	--	11.9	--	--	--	--	--
10...	1346	--	--	--	--	1.0	--	--	23	7.20	1.30	2.20	.2
FEB													
07...	1235	e105	55	7.8	3.0	--	--	12.9	--	--	--	--	--
07...	1236	--	--	--	--	.70	--	--	22	6.90	1.20	2.10	.2
APR													
18...	1220	e453	53	8.5	8.5	--	4.5	10.5	23	6.95	1.31	2.39	.2
MAY													
09...	1040	e82	50	7.8	9.0	--	5.4	10.1	20	6.22	1.20	2.08	.2
23...	1345	e512	45	7.8	11.5	--	3.4	9.2	19	5.73	1.16	1.94	.2
JUN													
07...	0850	e299	38	7.2	12.5	--	2.5	8.9	15	4.36	.900	1.72	.2
27...	1235	e65	40	7.9	18.5	--	2.7	7.8	15	4.63	.898	1.85	.2
JUL													
11...	1150	e107	46	8.0	19.5	--	2.1	8.1	18	5.33	1.04	2.06	.2
25...	1215	e83	46	7.8	21.0	--	2.4	7.9	18	5.42	1.04	1.95	.2
AUG													
09...	0900	e291	51	7.6	18.5	--	2.0	7.3	20	6.13	1.19	2.19	.2
SEP													
12...	1335	e26	59	9.1	19.5	--	2.0	9.5	22	6.85	1.26	2.20	.2

Date	POTAS-SIUM, DIS-SOLVED (MG/L) AS K (00935)	ALKA-LINITY WAT.DIS FET LAB (MG/L) CACO3 (29801)	ALKA-LINITY WAT.DIS FET LAB (MG/L) CACO3 (00421)	BICAR-BONATE WAT.DIS FET LAB (MG/L) HCO3 (29805)	CAR-BONATE WAT.DIS FET LAB (MG/L) CO3 (29808)	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	CHLO-RIDE, DIS-SOLVED (MG/L) AS CL (00940)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L) AS N (00625)
OCT													
25...	--	--	--	--	--	--	--	--	--	--	E.009	<.015	.20
25...	--	--	20	24	<3.0	2.6	.7	32	--	--	--	--	--
NOV													
08...	--	--	--	--	--	--	--	--	--	--	.017	<.015	.23
08...	--	--	22	27	<3.0	4.1	.7	16	--	--	--	--	--
DEC													
06...	--	--	--	--	--	--	--	--	--	--	.024	<.015	.24
06...	--	--	24	29	<3.0	2.8	.5	40	--	--	--	--	--
JAN													
10...	--	--	--	--	--	--	--	--	--	--	.023	E.012	.31
10...	--	--	26	32	<3.0	4.1	1.3	34	--	--	--	--	--
FEB													
07...	--	--	--	--	--	--	--	--	--	--	.015	<.015	.18
07...	--	--	27	33	<3.0	3.0	.8	52	--	--	--	--	--
APR													
18...	.74	25	--	--	--	3.1	1.10	31	31	.04	<.013	<.015	.24
MAY													
09...	.73	22	--	--	--	2.6	.73	37	27	.05	E.010	<.015	.20
23...	.65	21	--	--	--	2.5	.68	38	25	.05	E.010	<.015	.27
JUN													
07...	.57	16	--	--	--	2.3	1.10	34	21	.05	.055	<.015	.27
27...	.54	18	--	--	--	2.3	.99	34	22	.05	.059	.017	.20
JUL													
11...	.54	20	--	--	--	2.2	.74	37	24	.05	.088	.017	.24
25...	.57	20	--	--	--	2.3	.69	42	24	.06	.035	.023	.28
AUG													
09...	.58	23	--	--	--	2.5	.75	36	27	.05	.051	.035	.26
SEP													
12...	.64	26	--	--	--	2.4	.61	40	30	.05	.027	.043	.30

E Estimated laboratory analysis value.
e Estimated.

BIG THOMPSON PROJECT--Continued

402524105133300 HANSEN CANAL BELOW TRIFURCATION NEAR LOVELAND, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)
OCT 25...	.015	<.004	<.007	--	--	--	--	--	--	--	--	--
OCT 25...	--	--	--	2.8	<5.0	<2.0	<100	<1.0	<3.0	<.10	<3.0	<.10
NOV 08...	.017	E.004	<.007	--	--	--	--	--	--	--	--	--
NOV 08...	--	--	--	2.7	<5.0	M	<100	<1.0	10	<.10	<3.0	<.10
DEC 06...	.013	E.004	<.007	--	--	--	--	--	--	--	--	--
DEC 06...	--	--	--	2.9	<5.0	<2.0	<100	<1.0	<3.0	<.10	<3.0	<.10
JAN 10...	.011	E.003	<.007	--	--	--	--	--	--	--	--	--
JAN 10...	--	--	--	2.9	<5.0	<2	<100	<1	<3	<.10	<3	<.1
FEB 07...	.011	E.003	<.007	--	--	--	--	--	--	--	--	--
FEB 07...	--	--	--	2.7	<5.0	<2	<100	<1	<3	<.10	<3	<.1
APR 18...	.021	E.004	<.007	--	E.1	6.5	34	E.05	.9	<.01	.17	<1
MAY 09...	.016	E.004	<.007	--	E.2	1.5	26	<.08	1.6	<.01	.19	<1
MAY 23...	.022	.005	<.007	--	E.1	4.8	45	<.08	2.1	<.01	.25	<1
JUN 07...	.021	.006	<.007	--	E.1	5.5	40	.09	1.8	<.01	.22	<1
JUN 27...	.025	.009	E.004	--	.2	1.8	26	E.04	2.1	<.01	.11	<1
JUL 11...	.034	.016	.010	--	E.1	2.2	29	.19	2.1	<.01	.26	<1
JUL 25...	.022	.009	<.007	--	.3	2.4	25	E.07	2.5	<.01	.31	<1
AUG 09...	.027	.012	E.004	--	.2	9.2	57	E.04	1.9	<.01	.15	<1
SEP 12...	.023	.012	<.007	--	.4	3.1	22	.22	2.3	<.01	.32	<1

Date	BENZENE TOTAL (UG/L) (34030)	ETHYL-BENZENE TOTAL (UG/L) (34371)	META/PARA-XYLENE WATER UNFLTRD REC (UG/L) (85795)	O-XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
OCT 25...	<.4	M	<.4	<.4	<.4
NOV 08...	<.4	M	<.4	<.4	<.4
DEC 06...	<.4	<.4	<.4	<.4	<.4
JAN 10...	<.4	<.4	<.4	<.4	<.4
FEB 07...	<.4	<.4	<.4	<.4	<.4
APR 18...	<.4	<.4	<.4	<.4	<.4
MAY 09...	<.4	<.4	<.4	<.4	<.4
MAY 23...	<.4	<.4	<.4	<.4	<.4
JUN 07...	<.4	<.4	<.4	<.4	<.4
JUN 27...	<.4	<.4	<.4	<.4	<.4
JUL 11...	<.4	<.4	<.4	<.4	<.4
JUL 25...	<.4	<.4	<.4	<.4	<.4
AUG 09...	<.4	<.4	<.4	<.4	<.4
SEP 12...	<.4	<.4	<.4	<.4	<.4

E Estimated laboratory analysis value.
M Presence of material verified but not quantified.

PLATTE RIVER BASIN

BIG THOMPSON PROJECT--Continued

403020105114700 HANSEN CANAL ABOVE TUNNEL NO 5 NEAR LOVELAND, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°30'20", long 105°11'47", in NW¹/₄NE¹/₄ sec.11, T.6 N., R.70 W., Larimer County, Hydrologic Unit 10190006, at 2.25 mi west of Horsetooth Reservoir (south inlet), 4.8 mi west of Ft. Collins.

PERIOD OF RECORD.--August 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	TURBID- ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL AS CACO3 (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)
OCT													
25...	1240	543	41	8.1	7.5	--	--	10.5	--	--	--	--	--
25...	1301	--	--	--	--	2.0	--	--	17	5.20	1.00	1.70	.2
NOV													
08...	1045	3.9	44	7.4	8.5	--	--	10.4	--	--	--	--	--
08...	1046	--	--	--	--	.80	--	--	17	5.30	1.00	2.60	.3
DEC													
06...	1340	33	45	8.4	2.5	--	--	12.4	--	--	--	--	--
06...	1341	--	--	--	--	1.5	--	--	21	6.50	1.10	1.80	.2
JAN													
11...	0905	116	54	8.0	2.0	--	--	11.9	--	--	--	--	--
11...	0906	--	--	--	--	.82	--	--	23	7.20	1.30	2.20	.2
FEB													
07...	1340	120	55	8.0	2.5	--	--	13.7	--	--	--	--	--
07...	1341	--	--	--	--	.65	--	--	23	6.90	1.30	2.10	.2
MAR													
21...	1135	16	58	8.8	3.0	--	--	11.1	--	--	--	--	--
21...	1136	--	--	--	--	.75	--	--	23	7.10	1.30	2.20	.2
APR													
18...	1325	475	54	8.3	9.0	--	2.7	10.4	23	7.03	1.32	2.45	.2
MAY													
09...	1230	77	55	7.9	9.0	--	5.0	10.1	21	6.26	1.21	2.07	.2
24...	0855	516	43	7.1	9.5	--	3.3	9.6	17	5.24	1.07	1.77	.2
JUN													
07...	1015	344	38	7.3	13.5	--	2.9	9.7	14	4.32	.894	1.70	.2
28...	0905	52	41	7.7	17.5	--	1.5	7.4	16	4.76	.921	1.91	.2
JUL													
11...	1250	69	47	8.0	20.0	--	2.3	7.9	18	5.35	1.03	2.07	.2
25...	1325	52	46	7.8	21.0	--	2.4	7.7	18	5.55	1.05	1.98	.2
AUG													
09...	1010	261	51	7.9	19.0	--	2.3	8.2	20	6.14	1.18	2.19	.2
SEP													
13...	0855	17	60	7.9	17.5	--	2.1	7.4	24	7.37	1.33	2.22	.2

BIG THOMPSON PROJECT--Continued

403020105114700 HANSEN CANAL ABOVE TUNNEL NO 5 NEAR LOVELAND, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT.DIS FET LAB (MG/L CACO3) (29801)	ALKA- LINITY WAT.DIS TOT FET LAB (MG/L AS CACO3) (00421)	BICAR- BONATE WAT.DIS FET LAB (MG/L HCO3) (29805)	CAR- BONATE WAT.DIS FET LAB (MG/L CO3) (29808)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
OCT													
25...	--	--	--	--	--	--	--	--	--	--	--	E.010	<.015
25...	--	--	18	22	<3.0	2.7	.7	42	--	--	--	--	--
NOV													
08...	--	--	--	--	--	--	--	--	--	--	--	<.013	<.015
08...	--	--	20	24	<3.0	4.1	1.0	16	--	--	--	--	--
DEC													
06...	--	--	--	--	--	--	--	--	--	--	--	.017	<.015
06...	--	--	22	27	<3.0	2.8	.5	28	--	--	--	--	--
JAN													
11...	--	--	--	--	--	--	--	--	--	--	--	.022	E.009
11...	--	--	26	32	<3.0	3.2	.8	40	--	--	--	--	--
FEB													
07...	--	--	--	--	--	--	--	--	--	--	--	.014	<.015
07...	--	--	26	32	<3.0	3.0	.8	50	--	--	--	--	--
MAR													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	28	34	<3.0	3.2	1.0	56	--	--	--	--	--
APR													
18...	.74	26	--	--	--	3.1	1.06	40	31	.05	51.0	<.013	<.015
MAY													
09...	.70	23	--	--	--	2.6	.72	34	28	.05	7.10	E.011	<.015
24...	.62	20	--	--	--	2.7	.66	27	24	.04	37.7	.024	<.015
JUN													
07...	.55	16	--	--	--	2.3	.84	35	21	.05	32.6	.049	E.008
28...	.58	18	--	--	--	2.2	.72	31	22	.04	4.33	.034	.027
JUL													
11...	.57	20	--	--	--	2.3	.99	32	25	.04	5.95	.090	.021
25...	.57	20	--	--	--	2.3	.66	35	25	.05	4.96	.033	.024
AUG													
09...	.56	23	--	--	--	2.5	.75	41	27	.06	28.9	.055	.032
SEP													
13...	.67	27	--	--	--	2.5	.65	25	32	.03	1.17	.210	.069

Date	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	CARBON, TOTAL (MG/L AS C) (00680)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT													
25...	.23	.013	<.004	<.007	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	2.8	<5.0	<2.0	<100	<1.0	<3.0	<.10	<3.0	<.10
NOV													
08...	.21	.029	.017	.007	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	2.9	<5.0	M	<100	<1.0	<3.0	<.10	<3.0	<.10
DEC													
06...	.23	.011	E.004	<.007	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	3.2	<5.0	<2.0	<100	<1.0	<3.0	<.10	<3.0	<.10
JAN													
11...	.24	.011	<.004	<.007	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	2.8	<5.0	<2	<100	<1	<3	<.10	<3	<.1
FEB													
07...	.19	.010	E.002	<.007	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	2.7	<5.0	<2	<100	<1	<3	<.10	<3	<.1
MAR													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	2.8	<1.0	M	<100	<1	<3	<.10	<5	<.1
APR													
18...	.25	.025	E.003	<.007	--	<.2	5.9	32	<.08	1.0	<.01	.15	<1
MAY													
09...	.22	.016	E.004	<.007	--	E.1	2.4	24	<.08	1.6	<.01	.20	<1
24...	.26	.022	.005	<.007	--	E.1	10.3	48	E.06	1.8	<.01	.29	<1
JUN													
07...	.36	.024	.006	<.007	--	E.1	5.7	41	E.08	1.8	<.01	.20	<1
28...	.23	.026	.015	.008	--	.2	4.4	31	E.05	2.0	<.01	.11	<1
JUL													
11...	.27	.033	.016	.010	--	E.1	2.3	25	.52	2.1	<.01	.27	<1
25...	.25	.021	.008	E.004	--	.2	3.1	22	E.05	1.8	<.01	.16	<1
AUG													
09...	.25	.027	.013	E.006	--	.2	9.3	55	<.08	1.5	<.01	.15	<1
SEP													
13...	.43	.026	.010	<.007	--	.4	6.6	21	.08	1.1	<.01	.36	<1

E Estimated laboratory analysis value.
M Presence of material verified but not quantified.

PLATTE RIVER BASIN

BIG THOMPSON PROJECT--Continued

403020105114700 HANSEN CANAL ABOVE TUNNEL NO 5 NEAR LOVELAND, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
OCT					
25...	<.4	M	M	<.4	<.4
NOV					
08...	<.4	M	M	M	<.4
DEC					
06...	<.4	<.4	M	<.4	<.4
JAN					
11...	<.4	<.4	M	M	<.4
FEB					
07...	<.4	<.4	M	M	<.4
MAR					
21...	<.4	<.4	<.4	<.4	<.4
APR					
18...	<.4	<.4	<.4	<.4	<.4
MAY					
09...	<.4	<.4	<.4	<.4	<.4
24...	<.4	<.4	<.4	<.4	<.4
JUN					
07...	<.4	<.4	<.4	<.4	<.4
28...	<.4	<.4	<.4	<.4	<.4
JUL					
11...	<.4	<.4	<.4	<.4	<.4
25...	<.4	<.4	<.4	<.4	<.4
AUG					
09...	<.4	<.4	<.4	<.4	<.4
SEP					
13...	<.4	<.4	<.4	<.4	<.4

M Presence of material verified but not quantified.

BIG THOMPSON PROJECT--Continued

403814105111800 HANSEN CANAL ABOVE GREELEY FILTRATION PLANT NEAR LAPORTE, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°38'14", long 105°11'18", in SW¹/₄NE¹/₄ sec.23, T.8 N., R.70 W., Larimer County, Hydrologic Unit 10190006, 9.4 mi north of Fort Collins.

PERIOD OF RECORD.--August 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD WATER UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L) (00900)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	SODIUM, DIS-SOLVED (MG/L) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L) (00935)	
APR	19...	0845	16	64	8.1	5.0	8.4	10.2	28	8.73	1.57	2.36	.2	.75
MAY	09...	1340	e110	64	8.3	11.5	16	10.5	27	8.28	1.49	2.30	.2	.79
	24...	1120	e220	63	8.0	12.0	7.9	10.4	27	8.39	1.55	2.33	.2	.65
JUN	07...	1200	e225	64	7.9	13.5	6.4	10.2	27	8.39	1.54	2.34	.2	.78
	28...	1045	e165	55	7.8	16.5	6.0	9.4	22	6.75	1.24	2.08	.2	.70
JUL	12...	0930	e176	58	7.8	18.5	10	8.7	23	7.11	1.28	2.07	.2	.70
	26...	0850	e152	69	8.0	19.0	26	7.5	29	9.21	1.54	2.33	.2	.79
AUG	09...	1200	e30	81	8.3	19.5	23	8.1	34	10.3	1.95	2.67	.2	.74
SEP	13...	1055	e7.6	72	8.1	18.0	5.6	7.4	28	8.73	1.61	2.43	.2	.65

Date	ALKA-LINITY WAT.DIS FET LAB (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NO2+NO3 (MG/L) (00631)	NITRO-GEN, DIS-SOLVED (MG/L) (00608)	NITRO-GEN,AM-ORGANIC TOTAL (MG/L) (00625)	PHOS-PHORUS TOTAL (MG/L) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L) (00671)	
APR	19...	30	4.6	.8	31	37	.04	1.34	.067	<.015	.19	.017	<.004	<.007
MAY	09...	29	4.2	.77	44	36	.06	--	.068	<.015	.19	.020	.005	<.007
	24...	29	3.7	.85	43	35	.06	--	.062	E.013	.22	.023	.006	<.007
JUN	07...	29	3.8	1.05	47	35	.06	--	.062	E.008	.17	.016	E.004	<.007
	28...	24	2.9	1.04	35	29	.05	--	.068	.021	.22	.017	.005	<.007
JUL	12...	26	2.7	.76	40	30	.05	--	.047	.030	.23	.023	.005	<.007
	26...	30	3.8	1.04	41	37	.06	--	.064	.016	.26	.038	.006	E.005
AUG	09...	34	5.3	.85	54	42	.07	--	.047	E.011	.29	.040	.007	<.007
SEP	13...	32	4.4	.66	52	38	.07	--	.018	.022	.29	.021	.005	<.007

Date	ARSENIC DIS-SOLVED (UG/L) (01000)	COPPER, DIS-SOLVED (UG/L) (01040)	IRON, DIS-SOLVED (UG/L) (01046)	LEAD, DIS-SOLVED (UG/L) (01049)	MANGA-NESE, DIS-SOLVED (UG/L) (01056)	MERCURY DIS-SOLVED (UG/L) (71890)	NICKEL, DIS-SOLVED (UG/L) (01065)	SILVER, DIS-SOLVED (UG/L) (01075)	
APR	19...	.9	<.2	10	<.08	M	<.01	<.06	<1
MAY	09...	.3	3.3	E8	<.08	5.8	<.01	.27	<1
	24...	.2	3.3	E8	<.08	4.9	<.01	.28	<1
JUN	07...	.3	3.6	E8	.08	.9	<.01	.29	<1
	28...	.2	4.4	14	<.08	.7	<.01	.14	<1
JUL	12...	.4	3.3	E9	E.06	.9	<.01	.08	<1
	26...	.4	3.2	E5	<.08	.5	<.01	.26	<1
AUG	09...	.3	2.9	<10	<.08	1.3	<.01	.32	<1
SEP	13...	.4	3.7	11	.12	1.0	<.01	.51	<1

E Estimated laboratory analysis value.
 e Estimated.
 M Presence of material verified but not quantified.

PLATTE RIVER BASIN

BIG THOMPSON PROJECT--Continued

403814105111800 HANSEN CANAL ABOVE GREELEY FILTRATION PLANT NEAR LAPORTE, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
APR					
19...	<.4	<.4	<.4	<.4	<.4
MAY					
09...	<.4	<.4	<.4	<.4	<.4
24...	<.4	<.4	<.4	<.4	<.4
JUN					
07...	<.4	<.4	<.4	<.4	<.4
28...	<.4	<.4	<.4	<.4	<.4
JUL					
12...	<.4	<.4	<.4	<.4	<.4
26...	<.4	<.4	<.4	<.4	<.4
AUG					
09...	<.4	<.4	<.4	<.4	<.4
SEP					
13...	<.4	<.4	<.4	<.4	<.4

BIG THOMPSON PROJECT--Continued

402518105131300 BIG THOMPSON RIVER BELOW BIG THOMPSON POWER PLANT NEAR LOVELAND, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°25'18", long 105°13'13", in SW¹/₄SE¹/₄ sec.3, T.5 N., R.70 W., Larimer County, Hydrologic Unit 10190006, approximately 280 ft downstream of bridge, approximately 1.7 mi from Hwy 34, approximately 880 ft downstream of Big Thompson Hydroelectric Power Plant.

DRAINAGE AREA.--306 mi².

PERIOD OF RECORD.--March 2001 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L) AS CACO3 (00900)	CALCIUM DIS-SOLVED (MG/L) AS CA (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) AS MG (00925)	SODIUM, DIS-SOLVED (MG/L) AS NA (00930)	SODIUM AD-SORP-TION RATIO (00931)
OCT													
23...	1320	133	46	7.3	8.0	--	--	9.7	--	--	--	--	--
23...	1321	--	--	--	--	1.5	--	--	18	5.20	1.10	2.40	.2
NOV													
06...	1230	53	51	7.6	7.5	--	--	10.1	--	--	--	--	--
06...	1231	--	--	--	--	1.0	--	--	19	5.80	1.10	2.70	.3
DEC													
05...	0840	19	60	7.0	.0	--	--	12.5	--	--	--	--	--
05...	0841	--	--	--	--	.95	--	--	23	7.00	1.30	3.80	.3
JAN													
09...	0905	26	67	7.1	.0	--	--	13.4	--	--	--	--	--
09...	0906	--	--	--	--	4.0	--	--	23	7.10	1.40	4.40	.4
FEB													
06...	0950	25	73	7.0	.5	--	--	13.5	--	--	--	--	--
06...	0951	--	--	--	--	.30	--	--	24	7.30	1.40	4.40	.4
MAR													
20...	0915	24	76	--	1.5	--	--	12.3	--	--	--	--	--
20...	0916	--	--	--	--	.90	--	--	25	7.50	1.50	4.60	.4
APR													
17...	0850	85	59	8.1	10.5	--	3.4	10.1	22	6.57	1.35	3.42	.3
MAY													
08...	0850	176	54	7.2	10.5	--	7.3	9.6	22	6.55	1.32	2.46	.2
22...	1045	219	47	7.7	9.0	--	5.3	10.2	18	5.43	1.13	2.41	.2
JUN													
05...	1135	296	37	7.7	12.5	--	3.6	9.5	15	4.57	.930	1.74	.2
26...	1050	220	41	7.9	17.5	--	1.6	7.7	15	4.61	.916	1.93	.2
JUL													
10...	1015	182	47	8.0	19.0	--	2.2	8.0	17	5.30	1.02	2.06	.2
24...	1030	129	46	7.7	19.0	--	4.2	7.8	17	5.09	1.02	2.43	.3
AUG													
07...	1130	142	50	7.6	19.5	--	2.0	7.5	20	5.92	1.17	2.41	.2
SEP													
11...	1030	92	60	8.3	16.0	--	3.3	8.4	21	6.39	1.26	3.08	.3

PLATTE RIVER BASIN

BIG THOMPSON PROJECT--Continued

402518105131300 BIG THOMPSON RIVER BELOW BIG THOMPSON POWER PLANT NEAR LOVELAND, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT.DIS FET LAB (MG/L CACO3) (29801)	ALKA- LINITY WAT.DIS TOT FET LAB MG/L AS CACO3 (00421)	BICAR- BONATE WAT.DIS FET LAB (MG/L HCO3) (29805)	CAR- BONATE WAT.DIS FET LAB (MG/L CO3) (29808)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
	OCT												
23...	--	--	--	--	--	--	--	--	--	--	--	<.013	<.015
23...	--	--	20	24	<3.0	2.9	1.0	32	--	--	--	--	--
NOV													
06...	--	--	--	--	--	--	--	--	--	--	--	<.013	<.015
06...	--	--	22	27	<3.0	4.1	1.0	130	--	--	--	--	--
DEC													
05...	--	--	--	--	--	--	--	--	--	--	--	.374	.033
05...	--	--	22	27	<3.0	3.7	2.2	44	--	--	--	--	--
JAN													
09...	--	--	--	--	--	--	--	--	--	--	--	.505	.140
09...	--	--	26	32	<3.0	4.9	3.0	44	--	--	--	--	--
FEB													
06...	--	--	--	--	--	--	--	--	--	--	--	.547	.092
06...	--	--	24	29	<3.0	5.0	3.2	66	--	--	--	--	--
MAR													
20...	--	--	--	--	--	--	--	--	--	--	--	.282	<.015
20...	--	--	29	35	<3.0	4.0	4.3	64	--	--	--	--	--
APR													
17...	.81	25	--	--	--	3.3	2.20	32	33	.04	7.35	.045	<.015
MAY													
08...	.78	24	--	--	--	2.8	1.13	40	30	.05	18.8	.015	<.015
22...	.66	20	--	--	--	2.6	1.27	32	26	.04	--	.085	E.009
JUN													
05...	.60	16	--	--	--	2.2	1.26	34	21	.05	26.9	.057	<.015
26...	.57	17	--	--	--	2.2	1.11	30	22	.04	17.7	.081	.017
JUL													
10...	.48	20	--	--	--	2.1	.82	34	24	.05	16.7	.113	.018
24...	.77	19	--	--	--	2.4	1.24	30	25	.04	10.6	.200	.017
AUG													
07...	.65	22	--	--	--	2.5	.97	39	27	.05	15.0	.099	.026
SEP													
11...	.81	25	--	--	--	2.6	2.09	26	32	.04	6.46	.174	.017
Date	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	CARBON, TOTAL (MG/L AS C) (00680)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT													
23...	.21	.028	.013	.008	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	2.9	<5.0	<2.0	<100	<1.0	<3.0	<.10	<3.0	<.10
NOV													
06...	.23	.031	.019	.012	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	2.7	<5.0	<2.0	<100	<1.0	<3.0	<.10	<3.0	<.10
DEC													
05...	.21	.073	.066	.061	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	2.4	<5.0	<2.0	<100	<1.0	M	<.10	<3.0	<.10
JAN													
09...	.37	.093	.073	.066	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	2.5	<5.0	<2	<100	<1	<3	<.10	<3	<.1
FEB													
06...	.24	.045	.039	.034	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	2.3	<5.0	<2	<100	<1	<3	<.10	<3	<.1
MAR													
20...	.17	.024	.013	.007	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	3.0	<1.0	<2	<100	<1	<3	<.10	<5	<.1
APR													
17...	.18	.009	<.004	<.007	--	.2	.9	39	<.08	3.4	<.01	.07	<1
MAY													
08...	.25	.026	.007	<.007	--	E.1	1.6	34	<.08	1.9	<.01	.09	<1
22...	.59	.119	.018	.009	--	E.2	.8	54	E.06	7.7	<.01	.25	<1
JUN													
05...	.25	.022	E.003	<.007	--	E.1	1.5	42	<.08	1.8	<.01	.13	<1
26...	.20	.027	.014	E.006	--	.2	.8	32	<.08	2.4	<.01	.09	<1
JUL													
10...	.25	.038	.021	.015	--	.2	1.2	27	E.04	1.6	<.01	.08	<1
24...	.29	.058	--	.028	--	.2	1.7	37	<.08	2.9	<.01	.13	<1
AUG													
07...	.28	.050	.031	.022	--	.3	2.6	55	E.04	2.0	<.01	.16	<1
SEP													
11...	.32	.084	.061	.046	--	.3	1.6	37	E.07	3.7	<.01	.33	<1

E Estimated laboratory analysis value.

M Presence of material verified but not quantified.

BIG THOMPSON PROJECT--Continued

402518105131300 BIG THOMPSON RIVER BELOW BIG THOMPSON POWER PLANT NEAR LOVELAND, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
OCT					
23...	<.4	M	<.4	<.4	<.4
NOV					
06...	<.4	M	<.4	<.4	<.4
DEC					
05...	<.4	<.4	<.4	<.4	<.4
JAN					
09...	<.4	<.4	<.4	<.4	<.4
FEB					
06...	<.4	<.4	<.4	<.4	<.4
MAR					
20...	<.4	<.4	<.4	<.4	<.4
APR					
17...	<.4	<.4	<.4	<.4	<.4
MAY					
08...	<.4	<.4	<.4	<.4	<.4
22...	<.4	<.4	<.4	<.4	<.4
JUN					
05...	<.4	<.4	<.4	<.4	<.4
26...	<.4	<.4	<.4	<.4	<.4
JUL					
10...	<.4	<.4	<.4	<.4	<.4
24...	<.4	<.4	<.4	<.4	<.4
AUG					
07...	<.4	<.4	<.4	<.4	<.4
SEP					
11...	<.4	<.4	<.4	<.4	<.4

M Presence of material verified but not quantified.

PLATTE RIVER BASIN

BIG THOMPSON PROJECT--Continued

402533105124300 BIG THOMPSON RIVER BELOW SULZER GULCH NEAR LOVELAND, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°25'33", long 105°12'43", in NE¹/₄SE¹/₄ sec.3, T.5 N., R.70 W., Larimer County, Hydrologic Unit 10190006, approximately 230 ft downstream of bridge upstream of dam and Loveland Water Treatment Plant intake, approximately 1.2 mi from Hwy 34, and approximately 8.3 mi west of Loveland.

DRAINAGE AREA.--309 mi².

PERIOD OF RECORD.--August 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	TURBID- ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)
OCT													
24...	0855	133	48	7.1	5.0	--	--	10.6	--	--	--	--	--
24...	0856	--	--	--	--	1.5	--	--	19	5.50	1.20	2.40	.2
NOV													
06...	1335	48	53	8.1	8.5	--	--	8.5	--	--	--	--	--
06...	1336	--	--	--	--	.80	--	--	20	6.00	1.20	2.80	.3
DEC													
05...	1005	21	65	7.1	.5	--	--	12.3	--	--	--	--	--
05...	1006	--	--	--	--	.85	--	--	25	7.70	1.40	3.90	.3
JAN													
09...	1030	30	68	7.2	.5	--	--	12.7	--	--	--	--	--
09...	1031	--	--	--	--	4.5	--	--	25	7.40	1.50	4.40	.4
FEB													
06...	1135	30	73	7.0	.5	--	--	14.3	--	--	--	--	--
06...	1136	--	--	--	--	.30	--	--	25	7.50	1.50	4.50	.4
MAR													
20...	1105	23	78	8.7	2.0	--	--	12.8	--	--	--	--	--
20...	1106	--	--	--	--	.85	--	--	25	7.70	1.50	4.70	.4
APR													
17...	1015	85	59	8.3	7.5	--	3.8	10.2	23	7.05	1.32	3.33	.3
MAY													
08...	1010	199	55	7.3	10.0	--	3.2	9.5	22	6.70	1.32	2.68	.2
22...	1220	224	47	7.8	10.5	--	9.8	10.0	18	5.46	1.11	2.35	.2
JUN													
05...	1315	308	38	7.6	13.5	--	2.7	9.3	15	4.60	.932	1.79	.2
26...	1210	198	41	7.8	18.5	--	1.9	7.9	15	4.66	.922	1.95	.2
JUL													
10...	1125	177	47	8.0	20.0	--	2.0	7.5	18	5.35	1.04	2.15	.2
24...	1145	129	47	7.7	20.5	--	3.9	8.0	17	5.19	1.04	2.47	.3
AUG													
07...	1255	132	51	8.1	20.5	--	2.1	7.3	20	5.95	1.16	2.40	.2
SEP													
11...	1150	82	61	8.5	17.5	--	2.8	8.6	21	6.45	1.26	3.08	.3

BIG THOMPSON PROJECT--Continued

402533105124300 BIG THOMPSON RIVER BELOW SULZER GULCH NEAR LOVELAND, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT.DIS FET LAB (MG/L CACO3) (29801)	ALKA- LINITY WAT DIS TOT FET LAB MG/L AS CACO3 (00421)	BICAR- BONATE WAT.DIS FET LAB (MG/L HCO3) (29805)	CAR- BONATE WAT.DIS FET LAB (MG/L CO3) (29808)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
OCT													
24...	--	--	--	--	--	--	--	--	--	--	--	<.013	<.015
24...	--	--	22	27	<3.0	2.9	1.0	34	--	--	--	--	--
NOV													
06...	--	--	--	--	--	--	--	--	--	--	--	<.013	<.015
06...	--	--	22	27	<3.0	4.1	1.1	130	--	--	--	--	--
DEC													
05...	--	--	--	--	--	--	--	--	--	--	--	.359	.032
05...	--	--	26	32	<3.0	3.8	2.2	44	--	--	--	--	--
JAN													
09...	--	--	--	--	--	--	--	--	--	--	--	.495	.128
09...	--	--	27	33	<3.0	4.9	3.0	42	--	--	--	--	--
FEB													
06...	--	--	--	--	--	--	--	--	--	--	--	.536	.081
06...	--	--	24	29	<3.0	5.1	3.2	64	--	--	--	--	--
MAR													
20...	--	--	--	--	--	--	--	--	--	--	--	.239	<.015
20...	--	--	31	35	<3.0	4.0	4.3	68	--	--	--	--	--
APR													
17...	.58	26	--	--	--	3.6	2.29	41	34	.06	9.37	.033	<.015
MAY													
08...	.79	24	--	--	--	3.0	1.73	34	31	.05	18.2	.015	<.015
22...	.64	20	--	--	--	2.6	1.20	35	26	.05	--	.061	E.009
JUN													
05...	.59	16	--	--	--	2.2	.91	31	21	.04	26.2	.056	<.015
26...	.67	18	--	--	--	2.2	1.10	21	23	.03	11.3	.077	.016
JUL													
10...	.62	20	--	--	--	2.3	.83	31	25	.04	14.8	.119	.019
24...	.82	20	--	--	--	2.4	1.27	30	26	.04	10.5	.202	.018
AUG													
07...	.65	22	--	--	--	2.5	1.00	39	27	.05	14.1	.091	.024
SEP													
11...	.84	25	--	--	--	2.7	1.57	18	32	.02	3.89	.149	.022

Date	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS C) (00671)	CARBON, TOTAL (MG/L AS C) (00680)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT													
24...	.19	.025	.010	.008	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	2.8	<5.0	<2.0	<100	<1.0	<3.0	<.10	<3.0	<.10
NOV													
06...	.19	.031	.021	.014	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	2.6	<5.0	<2.0	<100	<1.0	M	<.10	<3.0	<.10
DEC													
05...	.19	.071	.065	.055	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	2.4	<5.0	<2.0	<100	<1.0	M	<.10	<3.0	<.10
JAN													
09...	.35	.089	.070	.062	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	2.4	<5.0	<2	<100	<1	M	<.10	<3	<.1
FEB													
06...	.26	.049	.038	.033	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	2.4	<5.0	<2	<100	<1	M	<.10	<3	<.1
MAR													
20...	.22	.027	.014	.008	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	2.6	<1.0	<2	<100	<1	M	<.10	<5	<.1
APR													
17...	.28	.044	.022	.013	--	.2	1.0	41	E.05	4.6	<.01	E.05	<1
MAY													
08...	.25	.032	.010	E.004	--	E.2	1.5	38	<.08	3.1	<.01	.21	<1
22...	.63	.099	.018	.008	--	E.2	.8	52	.10	7.2	<.01	.26	<1
JUN													
05...	.26	.021	.006	<.007	--	E.1	1.5	39	E.05	2.6	<.01	.13	<1
26...	.21	.030	.015	E.006	--	.2	.8	35	<.08	3.4	<.01	.11	<1
JUL													
10...	.23	.042	.023	.017	--	.2	1.3	28	E.06	2.7	<.01	E.04	<1
24...	.30	.057	.036	.029	--	.2	1.9	41	.13	4.2	<.01	.19	<1
AUG													
07...	.26	.047	.030	.020	--	.2	1.3	53	E.07	3.0	<.01	.16	<1
SEP													
11...	.32	.084	.061	.048	--	.3	1.7	40	E.08	5.1	<.01	.36	<1

E Estimated laboratory analysis value.
M Presence of material verified but not quantified.

PLATTE RIVER BASIN

BIG THOMPSON PROJECT--Continued

402533105124300 BIG THOMPSON RIVER BELOW SULZER GULCH NEAR LOVELAND, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
OCT					
24...	<.4	M	<.4	<.4	<.4
NOV					
06...	<.4	M	<.4	<.4	<.4
DEC					
05...	<.4	<.4	<.4	<.4	<.4
JAN					
09...	<.4	<.4	<.4	<.4	<.4
FEB					
06...	<.4	<.4	<.4	<.4	<.4
MAR					
20...	<.4	<.4	<.4	<.4	<.4
APR					
17...	<.4	<.4	<.4	<.4	<.4
MAY					
08...	<.4	<.4	<.4	<.4	<.4
22...	<.4	<.4	<.4	<.4	<.4
JUN					
05...	<.4	<.4	<.4	<.4	<.4
26...	<.4	<.4	<.4	<.4	<.4
JUL					
10...	<.4	<.4	<.4	<.4	<.4
24...	<.4	M	<.4	<.4	<.4
AUG					
07...	<.4	<.4	<.4	<.4	<.4
SEP					
11...	<.4	<.4	<.4	<.4	<.4

M Presence of material verified but not quantified.

BIG THOMPSON PROJECT--Continued

06741510 BIG THOMPSON RIVER AT LOVELAND, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°22'43", long 105°03'38", in SE¹/₄SE¹/₄ sec.24, T.5 N., R.69 W., Larimer County, Hydrologic Unit 10190006, on right bank 690 ft downstream from county road bridge C-13, 1.7 mi south of sugar refinery in Loveland, and 1.9 mi downstream from Farmers Ditch diversion.

DRAINAGE AREA.--535 mi².

PERIOD OF RECORD.--July 1979 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L) AS CAC03 (00900)	CALCIUM DIS-SOLVED (MG/L) AS CA (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) AS MG (00925)	SODIUM, DIS-SOLVED (MG/L) AS NA (00930)	SODIUM AD-SORP-TION RATIO (00931)
OCT													
24...	1045	e17	1100	8.7	8.0	--	--	10.1	--	--	--	--	--
24...	1046	--	--	--	--	1.5	--	--	510	130	44.0	47.0	.9
NOV													
07...	0845	e16	1020	7.9	9.5	--	--	9.1	--	--	--	--	--
07...	0846	--	--	--	--	.80	--	--	480	130	38.0	34.0	.7
DEC													
05...	1215	e13	1080	8.3	4.0	--	--	12.2	--	--	--	--	--
05...	1216	--	--	--	--	1.0	--	--	570	160	42.0	37.0	.7
JAN													
09...	1210	e11	1060	8.2	4.0	--	--	12.7	--	--	--	--	--
09...	1211	--	--	--	--	.80	--	--	520	140	42.0	37.0	.7
FEB													
06...	1250	e7.3	1090	8.2	3.0	--	--	14.2	--	--	--	--	--
06...	1253	--	--	--	--	.25	--	--	490	130	40.0	37.0	.7
MAR													
20...	1240	e12	1070	8.4	11.0	--	--	11.0	--	--	--	--	--
20...	1241	--	--	--	--	.78	--	--	250	120	39.0	36.0	.7
APR													
17...	1200	e7.3	1350	8.4	13.5	--	1.4	10.9	680	176	58.9	58.2	1
MAY													
08...	1150	e76	266	8.4	13.0	--	11	9.6	110	30.3	8.64	9.31	.4
22...	1345	e57	272	8.2	13.5	--	7.4	9.7	110	31.3	8.92	9.48	.4
JUN													
06...	0835	e62	612	7.5	14.0	--	8.0	8.6	260	56.8	28.5	28.2	.8
26...	1320	e63	383	8.5	22.0	--	7.3	9.0	160	42.0	13.5	14.0	.5
JUL													
10...	1240	e77	367	8.5	23.0	--	18	8.2	150	41.7	12.3	12.7	.4
24...	1305	e96	374	8.4	22.5	--	32	8.4	160	44.8	11.8	11.6	.4
AUG													
08...	1000	e86	281	8.0	19.5	--	32	7.5	120	34.2	8.63	9.16	.4
SEP													
11...	1325	e38	424	8.5	18.5	--	5.8	9.5	170	45.0	15.1	15.9	.5

e Estimated.

PLATTE RIVER BASIN

BIG THOMPSON PROJECT--Continued

06741510 BIG THOMPSON RIVER AT LOVELAND, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT.DIS FET LAB (MG/L CACO3) (29801)	ALKA- LINITY WAT DIS TOT FET LAB MG/L AS CACO3 (00421)	BICAR- BONATE WAT.DIS FET LAB (MG/L HCO3) (29805)	CAR- BONATE WAT.DIS FET LAB (MG/L CO3) (29808)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT													
24...	--	--	--	--	--	--	--	--	--	--	.154	.025	.24
24...	--	--	130	160	<3.0	450	14.0	810	--	--	--	--	--
NOV													
07...	--	--	--	--	--	--	--	--	--	--	.209	.031	.25
07...	--	--	160	200	<3.0	380	9.9	840	--	--	--	--	--
DEC													
05...	--	--	--	--	--	--	--	--	--	--	.419	.044	.18
05...	--	--	170	210	<3.0	440	11.0	810	--	--	--	--	--
JAN													
09...	--	--	--	--	--	--	--	--	--	--	.020	.018	.22
09...	--	--	170	210	<3.0	400	18.0	810	--	--	--	--	--
FEB													
06...	--	--	--	--	--	--	--	--	--	--	.528	.051	.15
06...	--	--	140	170	<3.0	430	19.0	820	--	--	--	--	--
MAR													
20...	--	--	--	--	--	--	--	--	--	--	.215	.036	.20
20...	--	--	150	180	<3.0	440	13.0	810	--	--	--	--	--
APR													
17...	2.82	166	--	--	--	583	18.6	1090	998	1.48	.156	.068	.26
MAY													
08...	1.01	56	--	--	--	67.1	4.13	168	154	.23	.022	<.015	.31
22...	1.04	52	--	--	--	73.6	3.44	174	159	.24	.094	E.011	.37
JUN													
06...	1.69	59	--	--	--	243	5.23	435	399	.59	.086	.015	.40
26...	1.15	65	--	--	--	114	4.06	244	228	.33	.089	E.009	.25
JUL													
10...	.95	70	--	--	--	100	4.10	238	214	.32	.069	E.010	.32
24...	1.38	76	--	--	--	97.4	4.37	233	217	.32	.101	E.009	.42
AUG													
08...	1.13	63	--	--	--	69.2	3.90	186	164	.25	.085	E.010	.44
SEP													
11...	1.39	69	--	--	--	136	4.60	283	260	.39	.128	<.015	.29

Date	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT												
24...	.009	E.002	<.007	--	--	--	--	--	--	--	--	--
24...	--	--	--	4.0	<5.0	<2.0	150	<1.0	40	<.10	M	<.10
NOV												
07...	.008	E.004	<.007	--	--	--	--	--	--	--	--	--
07...	--	--	--	2.7	<5.0	<2.0	350	<1.0	30	<.10	M	<.10
DEC												
05...	.006	.009	E.004	--	--	--	--	--	--	--	--	--
05...	--	--	--	2.5	<5.0	<2.0	310	<1.0	20	<.10	M	<.10
JAN												
09...	.012	E.003	<.007	--	--	--	--	--	--	--	--	--
09...	--	--	--	2.1	<5.0	<2	350	<1	20	<.10	M	<.1
FEB												
06...	.005	E.003	<.007	--	--	--	--	--	--	--	--	--
06...	--	--	--	2.1	<5.0	<2	300	<1	30	<.10	M	<.1
MAR												
20...	.010	.005	<.007	--	--	--	--	--	--	--	--	--
20...	--	--	--	2.4	<1.0	<2	550	<1	50	<.10	M	<.1
APR												
17...	.012	.005	<.007	--	.9	2.9	78	<.08	37.4	<.01	1.12	<1
MAY												
08...	.044	.006	<.007	--	.3	1.4	18	<.08	12.7	<.01	.73	<1
22...	.050	.012	E.004	--	.3	1.5	30	<.08	11.3	<.01	.82	<1
JUN												
06...	.042	.009	E.004	--	.5	2.0	24	<.08	21.2	<.01	1.50	<1
26...	.034	.010	E.004	--	.5	1.5	E9	<.08	12.1	<.01	.25	<1
JUL												
10...	.051	.009	E.004	--	.7	1.6	E6	<.08	11.3	<.01	.55	<1
24...	.074	.011	E.004	--	.7	1.5	E6	<.08	9.4	<.01	.79	<1
AUG												
08...	.077	.009	<.007	--	.6	1.1	E8	.10	9.1	<.01	.77	<1
SEP												
11...	.037	.017	.007	--	.6	2.2	26	.11	16.5	<.01	1.68	<1

E Estimated laboratory analysis value.

M Presence of material verified but not quantified.

BIG THOMPSON PROJECT--Continued

06741510 BIG THOMPSON RIVER AT LOVELAND, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
OCT					
24...	<.4	M	<.4	<.4	<.4
NOV					
07...	<.4	M	<.4	<.4	<.4
DEC					
05...	<.4	<.4	<.4	<.4	<.4
JAN					
09...	<.4	<.4	<.4	<.4	<.4
FEB					
06...	<.4	<.4	<.4	<.4	<.4
MAR					
20...	<.4	<.4	<.4	<.4	<.4
APR					
17...	<.4	<.4	<.4	<.4	<.4
MAY					
08...	<.4	<.4	<.4	<.4	<.4
22...	<.4	<.4	<.4	<.4	<.4
JUN					
06...	<.4	<.4	<.4	<.4	<.4
26...	<.4	<.4	<.4	<.4	<.4
JUL					
10...	<.4	<.4	<.4	<.4	<.4
24...	<.4	<.4	<.4	<.4	<.4
AUG					
08...	<.4	<.4	<.4	<.4	<.4
SEP					
11...	<.4	<.4	<.4	<.4	<.4

M Presence of material verified but not quantified.

PLATTE RIVER BASIN

BIG THOMPSON PROJECT--Continued

06741520 BIG THOMPSON RIVER BELOW LOVELAND, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°23'00", long 105°01'45", in NW¹/₄SE¹/₄ sec.20, T.5 N., R.68 W., Larimer County, Hydrologic Unit 10190006, at county road 9E bridge, about 0.3 mi upstream from outlet ditch and 2.0 mi southeast of Loveland.

DRAINAGE AREA.--543 mi².

PERIOD OF RECORD.--June 1979 to December 1992, and March 2001 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	TURBID- ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)
OCT													
24...	1240	28	1000	8.2	11.0	--	--	12.2	--	--	--	--	--
24...	1241	--	--	--	--	1.5	--	--	380	91.0	36.0	61.0	1
NOV													
07...	1005	28	1010	8.6	10.5	--	--	12.8	--	--	--	--	--
07...	1006	--	--	--	--	.70	--	--	450	120	37.0	48.0	1
DEC													
06...	0825	17	1040	7.6	4.0	--	--	11.2	--	--	--	--	--
06...	0826	--	--	--	--	1.0	--	--	490	130	40.0	51.0	1
JAN													
09...	1310	23	971	7.9	8.5	--	--	13.4	--	--	--	--	--
09...	1311	--	--	--	--	1.0	--	--	380	98.0	33.0	61.0	1
FEB													
06...	1345	21	1020	8.4	5.0	--	--	13.7	--	--	--	--	--
06...	1346	--	--	--	--	1.0	--	--	360	90.0	34.0	64.0	1
MAR													
20...	1340	24	996	8.4	14.5	--	--	11.6	--	--	--	--	--
20...	1341	--	--	--	--	1.5	--	--	340	84.0	32.0	60.0	1
APR													
17...	1320	21	1070	8.7	17.5	--	3.4	14.2	410	97.3	39.9	77.4	2
MAY													
08...	1255	84	391	8.2	13.0	--	14	9.6	140	36.5	12.3	22.1	.8
23...	0850	78	391	7.6	11.5	--	22	9.3	150	39.3	13.5	19.2	.7
JUN													
06...	1015	92	671	8.1	16.0	--	6.5	10.1	260	58.0	29.2	36.6	1
27...	0835	68	478	8.1	20.0	--	4.5	7.7	190	47.5	16.9	23.1	.7
JUL													
11...	0815	78	412	7.8	20.0	--	13	7.5	170	43.2	13.9	19.8	.7
25...	0830	75	411	8.0	21.0	--	36	6.4	170	45.1	13.2	17.4	.6
AUG													
08...	1040	96	333	8.2	21.0	--	25	7.4	130	35.7	9.86	15.4	.6
SEP													
12...	1020	55	537	8.2	19.0	--	12	7.9	200	49.8	17.9	29.6	.9

BIG THOMPSON PROJECT--Continued

06741520 BIG THOMPSON RIVER BELOW LOVELAND, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT.DIS FET LAB (MG/L CACO3) (29801)	ALKA- LINITY WAT DIS TOT FET LAB MG/L AS CACO3 (00421)	BICAR- BONATE WAT.DIS FET LAB (MG/L HCO3) (29805)	CAR- BONATE WAT.DIS FET LAB (MG/L CO3) (29808)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
OCT													
24...	--	--	--	--	--	--	--	--	--	--	--	<8.10	E.013
24...	--	--	110	130	<3.0	370	20.0	700	--	--	--	--	--
NOV													
07...	--	--	--	--	--	--	--	--	--	--	--	4.26	.026
07...	--	--	150	180	<3.0	350	16.0	830	--	--	--	--	--
DEC													
06...	--	--	--	--	--	--	--	--	--	--	--	4.82	.043
06...	--	--	150	150	--	380	19.0	760	--	--	--	--	--
JAN													
09...	--	--	--	--	--	--	--	--	--	--	--	6.46	1.21
09...	--	--	140	170	<3.0	300	31.0	680	--	--	--	--	--
FEB													
06...	--	--	--	--	--	--	--	--	--	--	--	4.89	3.27
06...	--	--	130	160	<3.0	320	32.0	730	--	--	--	--	--
MAR													
20...	--	--	--	--	--	--	--	--	--	--	--	8.11	.446
20...	--	--	120	150	<3.0	340	32.0	710	--	--	--	--	--
APR													
17...	6.73	118	--	--	--	360	32.7	776	731	1.06	44.0	8.76	1.14
MAY													
08...	2.40	66	--	--	--	101	9.19	243	236	.33	55.2	2.54	.172
23...	1.73	63	--	--	--	112	6.94	268	236	.36	56.5	1.16	.036
JUN													
06...	2.58	66	--	--	--	251	8.71	477	437	.65	118	2.29	.023
27...	1.85	77	--	--	--	141	7.46	314	291	.43	57.8	1.44	.015
JUL													
11...	1.71	76	--	--	--	110	6.56	267	248	.36	55.8	1.24	.019
25...	1.88	78	--	--	--	105	6.54	270	242	.37	54.4	1.14	.016
AUG													
08...	1.98	64	--	--	--	78.5	6.74	219	197	.30	56.9	2.10	.021
SEP													
12...	2.98	73	--	--	--	165	9.36	361	335	.49	53.6	3.33	.029

Date	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	CARBON, TOTAL (MG/L AS C) (00680)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT													
24...	<.67	<1.33	E1.38	<1.29	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	5.0	<5.0	M	<500	<1.0	20	<.10	M	<.10
NOV													
07...	.51	.78	.78	.789	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	3.5	<5.0	M	310	<1.0	10	<.10	M	<.10
DEC													
06...	.50	.94	--	.899	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	3.7	<5.0	M	250	<1.0	30	<.10	M	<.10
JAN													
09...	2.5	1.92	1.89	1.72	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	7.0	<5.0	M	280	<1	40	<.10	M	<.1
FEB													
06...	4.3	1.76	1.79	1.57	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	6.6	<5.0	M	<500	<1	50	<.10	M	<.1
MAR													
20...	1.6	1.77	1.85	1.69	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	6.6	<1.0	M	390	<1	50	<.10	M	<.1
APR													
17...	3.0	2.23	2.15	1.94	--	.7	6.4	60	.41	44.3	<.01	1.97	<1
MAY													
08...	.82	.64	.57	.542	--	.4	1.6	24	.14	19.7	<.01	.30	<1
23...	.66	.28	.21	.207	--	.4	1.7	23	.09	19.1	<.01	1.12	<1
JUN													
06...	.54	.40	.37	.344	--	.6	2.3	22	.10	24.0	<.01	1.58	<1
27...	.34	.25	.23	.230	--	.6	2.0	13	.09	17.7	<.01	.32	<1
JUL													
11...	.43	.25	.22	.204	--	.6	4.4	E10	.09	14.8	<.01	1.67	<1
25...	.62	.33	.22	.199	--	.8	1.5	10	E.04	21.6	<.01	.91	<1
AUG													
08...	.62	.46	.34	.322	--	.7	1.4	E9	.09	15.3	<.01	.96	<1
SEP													
12...	.61	.61	.55	.509	--	.6	2.3	23	.13	20.9	<.01	2.12	<1

E Estimated laboratory analysis value.
M Presence of material verified but not quantified.

PLATTE RIVER BASIN

BIG THOMPSON PROJECT--Continued

06741520 BIG THOMPSON RIVER BELOW LOVELAND, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
OCT					
24...	<.4	M	<.4	<.4	<.4
NOV					
07...	<.4	M	<.4	<.4	<.4
DEC					
06...	<.4	<.4	<.4	<.4	<.4
JAN					
09...	<.4	<.4	<.4	<.4	M
FEB					
06...	<.4	<.4	<.4	<.4	M
MAR					
20...	<.4	<.4	<.4	<.4	<.4
APR					
17...	<.4	<.4	<.4	<.4	<.4
MAY					
08...	<.4	<.4	<.4	<.4	<.4
23...	<.4	<.4	<.4	<.4	<.4
JUN					
06...	<.4	<.4	<.4	<.4	<.4
27...	<.4	<.4	<.4	<.4	<.4
JUL					
11...	<.4	<.4	<.4	<.4	<.4
25...	<.4	<.4	<.4	<.4	<.4
AUG					
08...	<.4	<.4	<.4	<.4	<.4
SEP					
12...	<.4	<.4	<.4	<.4	<.4

M Presence of material verified but not quantified.

BIG THOMPSON PROJECT--Continued

06741530 BIG THOMPSON RIVER AT I-25 NEAR LOVELAND, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°23'51", long 104°59'32", in NW¹/₄SW¹/₄ sec.15, T.5 N., R.68 W., Larimer County, Hydrologic Unit 10190006, at bridge on Big Thompson River on north bound lane of service road, east of interstate Highway 25 (I-25), 1.5 mi downstream from Hillsboro Ditch, and 4.5 mi east of Loveland.

DRAINAGE AREA.--571 mi².

PERIOD OF RECORD.--April 1987 to December 1992, and March 2001 to current year.

REMARKS.--Additional water-quality data were collected as part of a water-quality assessment of drought conditions and are published in the "Drought Synoptic Sampling" section of this report.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)
OCT													
25...	0830	19	1080	8.1	7.0	--	--	--	--	--	--	--	--
25...	0831	--	--	--	--	1.5	--	--	420	100	41.0	60.0	1
NOV													
07...	1300	26	1020	8.8	12.0	--	--	13.3	--	--	--	--	--
07...	1301	--	--	--	--	.70	--	--	440	110	39.0	56.0	1
DEC													
06...	0930	19	1040	7.4	4.5	--	--	11.6	--	--	--	--	--
06...	0931	--	--	--	--	1.0	--	--	440	110	40.0	60.0	1
JAN													
10...	1005	22	1040	7.1	3.5	--	--	12.8	--	--	--	--	--
10...	1006	--	--	--	--	2.0	--	--	410	100	40.0	64.0	1
FEB													
07...	0930	19	1130	7.6	1.0	--	--	11.2	--	--	--	--	--
07...	0931	--	--	--	--	1.8	--	--	430	100	43.0	63.0	1
MAR													
21...	0900	19	1090	8.4	4.0	--	--	10.6	--	--	--	--	--
21...	0901	--	--	--	--	1.8	--	--	410	98.0	41.0	64.0	1
APR													
18...	0845	10	1230	8.0	10.5	--	1.9	--	500	115	52.3	83.3	2
MAY													
08...	1350	9.1	829	8.3	13.0	--	3.2	8.9	350	79.9	37.0	44.0	1
23...	1015	19	552	8.5	12.5	--	4.7	11.6	210	51.3	20.5	31.6	.9
JUN													
06...	1125	45	716	8.6	17.5	--	4.3	11.5	290	64.5	32.4	38.7	1
27...	0950	9.0	1020	8.1	21.0	--	1.7	7.2	440	101	46.0	52.2	1
JUL													
11...	0915	9.2	658	8.0	20.0	--	5.9	6.2	260	64.0	25.5	35.6	1
25...	0930	4.0	738	7.9	21.0	--	11	5.5	310	74.0	30.1	36.3	.9
AUG													
08...	1150	30	376	8.4	22.0	--	79	7.1	150	41.6	12.3	15.7	.5
SEP													
12...	0900	3.4	774	8.1	17.0	--	16	6.4	310	72.8	31.1	39.9	1

PLATTE RIVER BASIN

BIG THOMPSON PROJECT--Continued

06741530 BIG THOMPSON RIVER AT I-25 NEAR LOVELAND, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT.DIS FET LAB (MG/L CACO3) (29801)	ALKA- LINITY WAT.DIS TOT FET LAB MG/L AS CACO3 (00421)	BICAR- BONATE WAT.DIS FET LAB (MG/L HCO3) (29805)	CAR- BONATE WAT.DIS FET LAB (MG/L CO3) (29808)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
	OCT												
25...	--	--	--	--	--	--	--	--	--	--	--	7.91	.016
25...	--	--	130	160	<3.0	470	19.0	830	--	--	--	--	--
NOV													
07...	--	--	--	--	--	--	--	--	--	--	--	6.00	.018
07...	--	--	140	170	<3.0	340	19.0	840	--	--	--	--	--
DEC													
06...	--	--	--	--	--	--	--	--	--	--	--	7.82	.029
06...	--	--	140	150	<7.2	370	21.0	760	--	--	--	--	--
JAN													
10...	--	--	--	--	--	--	--	--	--	--	--	4.80	1.56
10...	--	--	160	200	<3.0	340	29.0	720	--	--	--	--	--
FEB													
07...	--	--	--	--	--	--	--	--	--	--	--	3.22	2.81
07...	--	--	180	220	<3.0	410	26.0	830	--	--	--	--	--
MAR													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	150	180	<3.0	400	28.0	800	--	--	--	--	--
APR													
18...	6.86	157	--	--	--	449	28.8	1030	863	1.40	28.2	6.11	1.16
MAY													
08...	4.00	142	--	--	--	283	11.9	597	552	.81	14.7	1.18	.222
23...	2.42	84	--	--	--	170	9.35	367	345	.50	18.6	1.84	.023
JUN													
06...	2.42	81	--	--	--	274	7.78	530	474	.72	64.3	1.18	E.013
27...	2.76	156	--	--	--	357	14.2	741	674	1.01	18.0	1.54	.073
JUL													
11...	2.76	107	--	--	--	201	11.0	465	415	.63	11.6	2.23	.060
25...	2.85	120	--	--	--	231	11.0	520	468	.71	5.69	2.07	.086
AUG													
08...	1.73	72	--	--	--	99.3	5.38	241	225	.33	19.8	1.11	.035
SEP													
12...	3.33	110	--	--	--	255	13.8	553	499	.75	5.13	3.70	.022
Date	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS DIS- SOLVED TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	CARBON, TOTAL (MG/L AS C) (00680)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
	OCT												
25...	.58	1.23	1.23	1.15	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	4.7	<5.0	M	130	<1.0	20	<.10	M	<.10
NOV													
07...	.57	1.01	1.03	.85	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	4.1	<5.0	M	280	<1.0	M	<.10	M	<.10
DEC													
06...	.62	1.32	1.37	1.16	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	4.5	<5.0	M	<500	<1.0	20	<.10	M	<.10
JAN													
10...	2.4	1.33	1.37	1.24	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	5.7	<5.0	M	300	<1	40	<.10	M	<.1
FEB													
07...	3.4	1.26	1.14	1.07	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	5.1	<5.0	M	280	<1	60	<.10	M	<.1
MAR													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	5.7	<1.0	M	470	<1	90	<.10	M	<.1
APR													
18...	2.4	1.94	1.94	1.86	--	.9	<.2	66	<.08	.2	<.01	<.06	<1
MAY													
08...	.68	.61	.57	.513	--	.8	2.0	33	E.07	116	<.01	1.13	<1
23...	.51	.41	.37	.349	--	.5	1.6	23	.10	25.6	<.01	1.24	<1
JUN													
06...	.47	.25	.21	.196	--	.7	2.0	14	E.07	19.7	<.01	20.5	<1
27...	.40	.42	.38	.374	--	1.0	2.3	25	E.07	93.9	<.01	.15	<1
JUL													
11...	.51	.44	.41	.398	--	.9	2.3	14	.09	52.1	<.01	2.24	<1
25...	.52	.47	.41	.387	--	1.0	1.8	E7	E.04	77.8	<.01	1.04	<1
AUG													
08...	1.2	.48	.184	.162	--	.7	1.6	E6	E.06	19.6	<.01	1.11	<1
SEP													
12...	.57	.47	.46	.414	--	1.0	2.5	18	.11	46.8	<.01	2.74	<1

E Estimated laboratory analysis value.

M Presence of material verified but not quantified.

BIG THOMPSON PROJECT--Continued

06741530 BIG THOMPSON RIVER AT I-25 NEAR LOVELAND, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
OCT					
25...	<.4	M	<.4	<.4	<.4
NOV					
07...	<.4	M	<.4	<.4	<.4
DEC					
06...	<.4	<.4	<.4	<.4	<.4
JAN					
10...	<.4	<.4	<.4	<.4	<.4
FEB					
07...	<.4	<.4	<.4	<.4	<.4
MAR					
21...	<.4	<.4	<.4	<.4	<.4
APR					
18...	<.4	<.4	<.4	<.4	<.4
MAY					
08...	<.4	<.4	<.4	<.4	<.4
23...	<.4	<.4	<.4	<.4	<.4
JUN					
06...	<.4	<.4	<.4	<.4	<.4
27...	<.4	<.4	<.4	<.4	<.4
JUL					
11...	<.4	<.4	<.4	<.4	<.4
25...	<.4	<.4	<.4	<.4	<.4
AUG					
08...	<.4	<.4	<.4	<.4	<.4

M Presence of material verified but not quantified.

PLATTE RIVER BASIN

DROUGHT SYNOPTIC SAMPLING

The U.S. Geological Survey (USGS) conducted a synoptic water-quality study during July, August, and September 2002, to characterize water-quality conditions in all of the major river basins in Colorado during the current drought. A tiered sampling approach with common core constituents at all sampling locations was used, facilitating statewide comparisons of water-quality conditions. Additional site-specific parameters were added to the core list depending on local water-quality issues and land use.

393948105053501 BEAR CREEK BELOW ESTES ROAD, AT LAKEWOOD, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°39'48", long 105°05'35", in SE¹/₄NE¹/₄ sec. 34, T. 4 S., R.69 W., Jefferson County, Hydrologic Unit 10190002, on Bear Creek downstream from Estes Road in Lakewood.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L) (00900)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	SODIUM, DIS-SOLVED (MG/L) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L) (00935)	ALKA-LINITY WAT.DIS FET LAB (MG/L) (29801)
AUG 22...	1200	1.1	897	8.1	19.0	9.1	340	102	22.0	56.1	1	2.77	247
SEP 16...	1100	1.5	783	8.0	16.0	9.1	290	84.3	19.3	51.0	1	2.96	192

Date	SULFATE DIS-SOLVED (MG/L) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L) (00940)	SILICA, DIS-SOLVED (MG/L) (00955)	SOLIDS, SUM OF CON-STI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) (00608)	NITRO-GEN, AM-MONIA + DIS-SOLVED (MG/L) (00623)	PHOS-PHORUS TOTAL (MG/L) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L) (00671)
AUG 22...	137	67.2	18.1	558	.76	1.60	.015	1.03	<.04	.21	E.04	E.04	.02
SEP 16...	126	58.1	11.6	472	.64	1.91	E.005	.65	<.04	.26	E.04	<.06	<.02

Date	CARBON, ORGANIC DIS-SOLVED (MG/L) (00681)	ALUM-INUM, DIS-SOLVED (UG/L) (01106)	CADMIUM DIS-SOLVED (UG/L) (01025)	COPPER, DIS-SOLVED (UG/L) (01040)	IRON, DIS-SOLVED (UG/L) (01046)	LEAD, DIS-SOLVED (UG/L) (01049)	MANGA-NESE, DIS-SOLVED (UG/L) (01056)	SILVER, DIS-SOLVED (UG/L) (01075)	ZINC, DIS-SOLVED (UG/L) (01090)
AUG 22...	2.7	<20	<.04	1.8	28	E.04	69.3	<1	15
SEP 16...	3.3	<20	<.04	1.2	21	E.05	62.9	<1	4

E Estimated laboratory analysis value.

DROUGHT SYNOPTIC SAMPLING--Continued

06713500 CHERRY CREEK AT DENVER, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°44'33", long 104°59'58", in SE¹/₄ sec.33, T.3 S., R.68 W., Denver County, Hydrologic Unit 10190003, on left bank 100 ft downstream from Champa Street Bridge in Denver, and 1.1 mi upstream from mouth.

REMARKS.--Samples collected in vicinity of gage.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	
AUG 05...	1400	12	1040	8.6	27.5	8.5	230	208	104	17.3	21.2	85.4	185	
SEP 05...	0940	9.0	1030	8.5	18.0	10.4	259	214	106	17.8	20.3	84.9	176	
Date	Time	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, MONIA + ORGANIC TOTAL (MG/L AS P) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)
AUG 05...	83.0	<10	18.9	.046	2.99	E.02	.51	.28	.22	4.6	<.1	1.2	1.2	
SEP 05...	83.2	E8	13.7	.018	3.66	<.04	.29	.22	.19	2.9	<.1	.3	.3	
Date	Time	NITRO-GEN, PAR TICULTE WAT FLT SUSP (MG/L AS N) (49570)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER, FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER, FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER, FLTRD 0.7 U GF, REC (UG/L) (82682)
AUG 05...	.18	<.006	<.004	<.006	.010	<.050	<.010	<.002	E.064	<.020	<.005	<.018	<.003	
SEP 05...	.05	<.006	<.004	E.004	.007	<.050	<.010	<.002	E.016	<.020	<.005	<.018	<.003	
Date	Time	P,P' DDE DISSOLV (UG/L) (34653)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER, FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER, DISS, REC (UG/L) (04095)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER, FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)
AUG 05...	<.003	.007	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027	
SEP 05...	<.003	E.004	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027	
Date	Time	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER, FLTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-CIS METHRIN WATER, FLTRD 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER, FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER, FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)
AUG 05...	<.006	<.013	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.05	<.004	<.010	
SEP 05...	<.006	<.013	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.05	<.004	<.010	

E Estimated laboratory analysis value.

DROUGHT SYNOPTIC SAMPLING--Continued

06713500 CHERRY CREEK AT DENVER, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	2,4-DB WATER, FLTRD GF 0.7U REC (UG/L) (38746)	2,4-D METHYL ESTER, WATER FLTRD REC (UG/L) (50470)	HYDROXY ATRA- ZINE WATER FLTRD REC (UG/L) (50355)	
AUG 05...	<.011	<.02	.008	<.02	<.034	<.02	<.005	<.002	<.009	.12	<.02	<.009	<.008
SEP 05...	<.011	<.02	.007	E.01	<.034	<.02	<.005	<.002	<.009	.04	<.02	<.009	<.008
Date	UREA 3(4-CHLOROPHENYL METHYL WAT FLT REC (UG/L) (61692)	3HYDRXY CARBO-FURAN WAT,FLT GF 0.7U REC (UG/L) (49308)	3-KETO CARBO-FURAN WATER FLTRD REC (UG/L) (50295)	ACIFL-UORFEN WATER, FLTRD GF 0.7U REC (UG/L) (49315)	ALDI-CARB, WATER, FLTRD GF 0.7U REC (UG/L) (49312)	ALDI-CARB SULFONE WAT,FLT GF 0.7U REC (UG/L) (49313)	ALDICA-RE SUL-FOXIDE, WAT,FLT GF 0.7U REC (UG/L) (49314)	BENDIO-CARB, WATER FLTRD REC (UG/L) (50299)	BEN-SUL-FURON WAT FLT REC (UG/L) (50300)	BEN-TA-ZON, WATER, FLTRD GF 0.7U REC (UG/L) (61693)	BRO-MACIL, WATER, DISS, REC (UG/L) (38711)	BRO-MOXNYLIL WATER, FLTRD GF 0.7U REC (UG/L) (04029)	BRO-MOXNYLIL WATER, FLTRD GF 0.7U REC (UG/L) (49311)
AUG 05...	<.02	<.006	<2	<.007	<.04	<.02	<.008	<.03	E.082	<.02	<.01	<.03	<.02
SEP 05...	<.02	<.006	<2	<.007	<.04	<.02	<.008	<.03	.018	<.02	<.01	<.03	<.02
Date	CAF-FEINE, WATER FLTRD REC (UG/L) (50305)	CHLOR-AMBEN, METHYL ESTER WATER FLTRD REC (UG/L) (61188)	CHLORI-MURON, WATER FLTRD REC (UG/L) (50306)	CHLORO-THALO-NIL, WAT,FLT GF 0.7U REC (UG/L) (49306)	CLOPYR-ALID, WATER, FLTRD GF 0.7U REC (UG/L) (49305)	CY-CLOATE, WATER, DISS, REC (UG/L) (04031)	DACTHAL MONO-ACID, WAT,FLT GF 0.7U REC (UG/L) (49304)	DEISO-PROPYL ATRAZIN WATER, FLTRD GF 0.7U REC (UG/L) (04038)	DICAMBA WATER, FLTRD REC (UG/L) (38442)	DICHLOR PROP, WATER, FLTRD GF 0.7U REC (UG/L) (49302)	DEETHYL DEISO-PROPYL ATRAZIN DISS, REC (UG/L) (04039)	DINOSEB WATER, FLTRD GF 0.7U REC (UG/L) (49301)	DIPHEN-AMID, WATER, DISS, REC (UG/L) (04033)
AUG 05...	E4.24	<.02	<.010	<.04	<.01	<.01	<.01	<.04	<.01	<.01	<.01	<.01	<.03
SEP 05...	E1.65	<.02	<.010	<.04	<.01	<.01	<.01	<.04	<.01	.02	<.01	<.01	<.03
Date	DIURON, WATER, FLTRD GF 0.7U REC (UG/L) (49300)	FEN-URON, WATER, FLTRD GF 0.7U REC (UG/L) (49297)	FLUMET-SULAM WATER, FLTRD REC (UG/L) (61694)	FLUO-METURON WATER, FLTRD GF 0.7U REC (UG/L) (38811)	IMAZ-AQUIN WATER, FLTRD REC (UG/L) (50356)	IMAZE-THAPYR WATER, FLTRD REC (UG/L) (50407)	IMID-ACLOP-RID WATER, FLTRD REC (UG/L) (61695)	MCPA, WATER, FLTRD GF 0.7U REC (UG/L) (38482)	MCPB, WATER, FLTRD GF 0.7U REC (UG/L) (38487)	METAL-AXYL WATER, FLTRD REC (UG/L) (50359)	METHIO-CARB, WATER, FLTRD GF 0.7U REC (UG/L) (38501)	METH-OMYL, WATER, FLTRD GF 0.7U REC (UG/L) (49296)	MET-SUL-FURON WATER, FLTRD REC (UG/L) (61697)
AUG 05...	<.01	<.03	<.01	<.03	<.02	<.02	<.007	<.02	<.01	E.01	<.008	<.004	<.03
SEP 05...	<.01	<.03	<.01	<.03	<.02	<.02	<.007	E.01	<.01	<.02	<.008	<.004	<.03
Date	NEB-URON, WATER, FLTRD GF 0.7U REC (UG/L) (49294)	NICOSUL FURON WATER, FLTRD REC (UG/L) (50364)	NORFLUR AZON, WATER, FLTRD GF 0.7U REC (UG/L) (49293)	ORY-ZALIN, WATER, FLTRD GF 0.7U REC (UG/L) (49292)	OXAMYL, WATER, FLTRD GF 0.7U REC (UG/L) (38866)	PIC-LORAM, WATER, FLTRD GF 0.7U REC (UG/L) (49291)	PRO-PHAM, WATER, FLTRD GF 0.7U REC (UG/L) (49236)	PROP-ICONA-ZOLE, WATER, FLTRD REC (UG/L) (50471)	PRO-POXUR, WATER, FLTRD GF 0.7U REC (UG/L) (38538)	PRO-SIDURON WATER, FLTRD REC (UG/L) (38548)	SULFO-MET-RURON WTR FLT REC (UG/L) (50337)	TER-BACIL, WATER, DISS, REC (UG/L) (04032)	TRI-CLOPYR, WATER, FLTRD GF 0.7U REC (UG/L) (49235)
AUG 05...	<.01	<.01	<.02	<.02	<.01	<.02	<.010	<.02	<.008	<.02	<.009	<.010	<.02
SEP 05...	<.01	<.01	<.02	<.02	<.01	<.02	<.010	<.02	<.008	<.02	<.009	<.010	<.02

E Estimated laboratory analysis value.

DROUGHT SYNOPTIC SAMPLING--Continued

06714000 SOUTH PLATTE RIVER AT DENVER, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°45'35", long 105°00'10", in NW¼SE¼ sec. 28, T. 3 S., R.68 W., Denver County, Hydrologic Unit 10190003, on right bank 90 ft upstream from Nineteenth Street Bridge in Denver, and 0.4 mi downstream from Cherry Creek.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L) (00900)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	SODIUM, DIS-SOLVED (MG/L) (00930)	SODIUM, AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L) (00935)	ALKA-LINITY WAT.DIS FET LAB CAC03) (29801)	
AUG	13...	1200	e32	992	8.4	21.5	16.8	270	80.5	16.2	97.0	3	10.3	176
	13...	1205	--	--	--	--	--	--	--	--	--	--	--	--
SEP	10...	0940	211	704	7.9	18.0	6.9	180	54.2	11.6	69.4	2	6.91	128

Date	Time	SULFATE DIS-SOLVED (MG/L) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L) (00940)	SILICA, DIS-SOLVED (MG/L) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS) PER (AC-PT) DAY) (70303)	SOLIDS, DIS-SOLVED (TONS) PER (DAY) (70302)	NITRO-GEN, NITRITE (MG/L) (00613)	NITRO-GEN, NO2+NO3 (MG/L) (00631)	NITRO-GEN, AMMONIA (MG/L) (00608)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L) (00607)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L) (00623)	PHOS-PHORUS TOTAL (MG/L) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L) (00666)
AUG	13...	166	91.5	10.8	627	.85	--	.344	9.73	.89	.99	1.9	1.56	1.56
	13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP	10...	115	58.1	8.75	427	.58	243	.219	5.35	.51	1.0	1.5	1.12	.86

Date	Time	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L) (00681)	ALUM-INUM, DIS-SOLVED (UG/L) (01106)	CADMIUM, DIS-SOLVED (UG/L) (01025)	COPPER, DIS-SOLVED (UG/L) (01040)	IRON, DIS-SOLVED (UG/L) (01046)	LEAD, DIS-SOLVED (UG/L) (01049)	MANGA-NESE, DIS-SOLVED (UG/L) (01056)	SILVER, DIS-SOLVED (UG/L) (01075)	ZINC, DIS-SOLVED (UG/L) (01090)	
AUG	13...		1.45	--	--	--	35	--	--	--	--	
	13...		--	--	--	--	--	--	--	--	--	
SEP	10...		.80	25.0	E10	.08	4.4	44	.25	45.8	<1	18

Date	Time	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER, REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, REC (UG/L) (39632)	BEN-FLUR-ALIN, WAT FLD 0.7 U GF, REC (UG/L) (82673)	BRO-MACIL, WATER, DISS, REC (UG/L) (04029)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAF-FEINE, WATER, FLTRD 0.7 U REC (UG/L) (50305)	CAR-BARYL WATER, FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER, FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS, DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)
AUG	13...	<.006	<.006	<.004	<.005	.007	<.010	--	<.002	--	E.020	<.020	<.005	<.018
	13...	--	--	--	--	--	--	<.5	--	1.0	<1	--	<.5	--
SEP	10...	<.006	<.006	<.004	<.005	<.007	<.010	--	<.002	--	E.340	<.020	<.005	<.018

Date	Time	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON, WAT FLT 0.7 U GF, REC PERCENT (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-POTON WATER, FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER, FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN, WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP, WATER, FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOFOS WATER, DISS, REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER, FLTRD 0.7 U GF, REC (UG/L) (82666)
AUG	13...	<.003	<.006	121	.049	<.005	<.02	<.002	<.009	<.005	<.003	105	<.004	<.035
	13...	--	--	--	M	--	--	--	--	--	--	--	--	--
SEP	10...	E.002	<.007	115	.072	<.005	<.02	<.002	<.009	<.005	<.003	116	<.004	<.035

E Estimated laboratory analysis value.
e Estimated.
M Presence of material verified but not quantified.

DROUGHT SYNOPTIC SAMPLING--Continued

06714000 SOUTH PLATTE RIVER AT DENVER, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	MALA- THION, DIS- SOLVED (UG/L) (39532)	METAL- AXYL WATER FLTRD REC (UG/L) (50359)	METHYL AZIN- PHOS WAT FLT GF, REC (UG/L) (82686)	METHYL PARA- THION WAT FLT GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT GF, REC (UG/L) (82687)
AUG 13...	<.027	--	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006
13...	--	<.5	--	--	<.5	--	--	--	--	--	--	--	--
SEP 10...	<.027	--	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006
Date	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT GF, REC (UG/L) (82661)
AUG 13...	<.011	.03	<.004	<.010	<.011	<.02	.005	.02	<.034	<.02	<.005	<.002	<.009
13...	--	<.5	--	--	--	--	--	--	--	--	--	--	--
SEP 10...	<.011	.04	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009
Date	DICHLOR VOS, WATER FLTRD REC (UG/L) (38775)												
AUG 13...	--												
13...	<1.00												
SEP 10...	--												
Date	1,4-DI- CHLORO- BENZENE DISSOLV (UG/L) (34572)	1METHYL NAPH- THALENE WATER, FLTRD REC (UG/L) (62054)	26DIMET NAPH- THALENE WATER, FLTRD REC (UG/L) (62055)	2METHYL NAPH- THALENE WATER, FLTRD REC (UG/L) (62056)	3-BETA- COPRO- STANOL, WATER, FLTRD REC (UG/L) (62057)	3METHYL 1(H)- INDOLE, WATER, FLTRD REC (UG/L) (62058)	3-TERT- BHA, WATER, FLTRD REC (UG/L) (62059)	4-CUMYL PHENOL, WATER, FLTRD REC (UG/L) (62060)	4-OCTYL PHENOL, WATER, FLTRD REC (UG/L) (62061)	4-TERT- OCTYL- PHENOL, WATER, FLTRD REC (UG/L) (62062)	5METHYL 1HBENZO TRIAZLE WATER, FLTRD REC (UG/L) (62063)	ACETO- PHENONE WATER, FLTRD REC (UG/L) (62064)	AHT NAPH- THALENE WATER, FLTRD REC (UG/L) (62065)
AUG 13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	<.5	<.5	<.5	<.5	<2	<1	<5	<1	<1	<1	<1	<2	<.5
SEP 10...	--	--	--	--	--	--	--	--	--	--	--	--	E.3
Date	ANTHRA- CENE DISSOLV (UG/L) (34221)	ANTHRA- QUINONE A- PYRENE FLTRD REC (UG/L) (62066)	BENZO- PHENONE WATER, FLTRD REC (UG/L) (34248)	BENZO- PHENONE WATER, FLTRD REC (UG/L) (62067)	BETA- SITOS- TEROL, WATER, FLTRD REC (UG/L) (62068)	BISPHE- NOL A, WATER, FLTRD REC (UG/L) (62069)	BISPHEN OL A-D3 SURRGTE S2033/ 8033 WAT FLT PERCENT (99583)	CAFFE- INE-C13 SURRGTE S2033/ 8033 FORM DISSOLV (UG/L) (34288)	CAFFE- INE-C13 SURRGTE S2033/ 8033 CAMPHOR WATER, FLTRD REC (UG/L) (99584)	CAMPHOR WATER, FLTRD REC (UG/L) (62070)	CARBA- ZOLE, WATER, FLTRD REC (UG/L) (62071)	CHOLE- TEROL, WATER, FLTRD REC (UG/L) (62072)	COT- ININE, WATER, FLTRD REC (UG/L) (62005)
AUG 13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	<.5	E.1	<.5	E.1	<2	M	83.0	<.5	77.1	<.5	<.5	<2	M
SEP 10...	--	--	--	--	--	--	--	--	--	--	--	--	--
Date	DCFLBI- PHENYL, SURRGTE S2033/ 8033 WAT FLT PERCENT (99585)	D-LIMO- NENE, WATER, FLTRD REC (UG/L) (62073)	FLUORO- ANTHENE DI0 SUR S2033/ 8033 FLTRD DISSOLV (UG/L) (34377)	HHMCP- BENZO- PYRAN, WATER, FLTRD REC (UG/L) (99586)	HHMCP- PYRAN, WATER, FLTRD REC (UG/L) (62075)	INDOLE, WATER, FLTRD REC (UG/L) (62076)	ISOBOR- NEOL, WATER, FLTRD REC (UG/L) (62077)	ISO- PHORONE DISSOLV (UG/L) (34409)	ISO- PROPYL BENZENE WATER, FLTRD REC (UG/L) (62078)	ISO- QUIN- OLINE, WATER, FLTRD REC (UG/L) (62079)	METHYL SALICY- LATE, WATER, FLTRD REC (UG/L) (62080)	METHYL SALICY- LATE, WATER, FLTRD REC (UG/L) (62081)	DEET, WATER, FLTRD REC (UG/L) (62082)
AUG 13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	44.3	<.5	<.5	65.3	M	<.5	<.5	<.5	<.5	<.5	<.5	<.5	E.2
SEP 10...	--	--	--	--	--	--	--	--	--	--	--	--	--

E Estimated laboratory analysis value.

M Presence of material verified but not quantified.

DROUGHT SYNOPTIC SAMPLING--Continued

06714000 SOUTH PLATTE RIVER AT DENVER, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NAPHTH- ALENE DISSOLV (UG/L) (34443)	NONYL- PHENOL, DIETHOX WATER, FLTERD REC (UG/L) (62083)	DI- ETHOXY- OCTYL- PHENOL WAT FLT REC (UG/L) (61705)	MONO- ETHOXY- OCTYL- PHENOL WAT FLT REC (UG/L) (61706)	PARA- CRESOL, WATER, FLTERD REC (UG/L) (62084)	PARA- NONYL- PHENOL, WATER, FLTERD REC (UG/L) (62085)	PENTA- CHLORO- PHENOL DISSOLV (UG/L) (34459)	PHENAN - THREN EDISSOL V(UG/L) (34462)	PHENOL WATER FILTRD (UG/L) (34466)	PYRENE DISSOLV (UG/L) (34470)	STIGMA- STANOL, WATER, FLTERD REC (UG/L) (62086)	TETRA- CHLORO- ETHY- LENE DISSOLV (UG/L) (34476)	FYROL CEF, WATER, FLTERD REC (UG/L) (62087)
AUG 13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	<.5	<5	M	E1	<1	<5	<2	M	<.5	<.5	<2	<.5	E.2
SEP 10...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	FYROL PCF, WATER, FLTERD REC (UG/L) (62088)	TRIBUTL PHOS- PHATE, WATER, FLTERD REC (UG/L) (62089)	TRICLO- SAN, WATER, FLTERD REC (UG/L) (62090)	TRI- ETHYL CITRATE REC (UG/L) (62091)	TRIPHNL PHOS- PHATE, WATER, FLTERD REC (UG/L) (62092)	TRIS(2- BUTOXE- PHOS- PHATE, WATER, FLTERD REC (UG/L) (62093)
AUG 13...	--	--	--	--	--	--
13...	E.2	E.1	M	<.5	E.1	E2.1
SEP 10...	--	--	--	--	--	--

E Estimated laboratory analysis value.
M Presence of material verified but not quantified.

PLATTE RIVER BASIN

DROUGHT SYNOPTIC SAMPLING--Continued

06719505 CLEAR CREEK AT GOLDEN, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°45'11", long 105°14'05", in NE¹/₄NW¹/₄ sec. 33, T. 3 S., R.70 W., Jefferson County, Hydrologic Unit 10190004, on left bank 100 ft downstream from U.S. Highway 6 bridge at west edge of Golden, 0.7 mi downstream from headgate of Church ditch, and 13.3 mi downstream from North Clear Creek.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L) CACO3 (00900)	CALCIUM DIS-SOLVED (MG/L) AS CA (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) AS MG (00925)	SODIUM, DIS-SOLVED (MG/L) AS NA (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L) AS K (00935)	ALKA-LINITY WAT.DIS FET LAB (MG/L) CACO3 (29801)
AUG 15...	1020	58	250	8.3	15.0	8.4	79	22.6	5.55	16.1	.8	2.64	40
SEP 12...	1430	72	277	8.1	17.0	8.0	91	25.4	6.57	16.8	.8	2.80	44

Date	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	CHLO-RIDE, DIS-SOLVED (MG/L) AS CL (00940)	SILICA, DIS-SOLVED (MG/L) AS SIO2 (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) AS N (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L) AS N (00623)	PHOS-PHORUS TOTAL (MG/L) AS P (00665)	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L) AS P (00671)
AUG 15...	56.1	11.0	7.06	146	.20	23.0	<.008	.15	<.04	.10	<.06	<.06	<.02
SEP 12...	61.8	16.6	7.18	164	.22	32.1	<.008	.14	<.04	.10	<.06	<.06	<.02

Date	CARBON, ORGANIC DIS-SOLVED (MG/L) AS C (00681)	ALUM-INUM, DIS-SOLVED (UG/L) AS AL (01106)	CADMIUM DIS-SOLVED (UG/L) AS CD (01025)	COPPER, DIS-SOLVED (UG/L) AS CU (01040)	IRON, DIS-SOLVED (UG/L) AS FE (01046)	LEAD, DIS-SOLVED (UG/L) AS PB (01049)	MANGA-NESE, DIS-SOLVED (UG/L) AS MN (01056)	SILVER, DIS-SOLVED (UG/L) AS AG (01075)	ZINC, DIS-SOLVED (UG/L) AS ZN (01090)
AUG 15...	--	20	.21	4.3	19	.23	21.3	<1	33
SEP 12...	1.4	20	.28	4.1	25	.23	35.8	<1	41

DROUGHT SYNOPTIC SAMPLING--Continued

06720500 SOUTH PLATTE RIVER AT HENDERSON, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°55'19", long 104°52'04", in SE¹/₄NE¹/₄ sec. 34, T. 1 S., R.67 W., Adams County, Hydrologic Unit 10190003, on right bank 500 ft upstream from bridge on State Highway 22, and 0.2 mi northwest of Henderson.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM, AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT.DIS FET LAB CACO3) (29801)	
AUG	13...	0900	e86	944	7.9	18.5	6.8	220	64.1	13.5	97.9	3	12.2	165
	13...	0905	--	--	--	--	--	--	--	--	--	--	--	--
SEP	10...	1340	e458	881	7.0	20.5	6.4	210	61.9	13.8	90.3	3	9.44	152
Date	Time	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN, AM-ORGANIC DIS-SOLVED (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
AUG	13...	145	92.5	11.1	571	.78	132	1.21	5.27	4.65	1.4	6.0	2.24	2.18
	13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP	10...	139	82.0	9.11	525	.71	649	.638	4.77	2.71	1.2	3.9	1.47	1.11
Date	Time							ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	IRON, DIS-SOLVED (UG/L AS FE) (01046)				
AUG	13...							2.04	--	65				
	13...							--	--	--				
SEP	10...							1.00	11.7	41				
Date	Time	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER, FLTRD DISS, REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN, WAT FLD 0.7 U GF, REC (UG/L) (82673)	BRO-MACIL, WATER, DISS, REC (UG/L) (04029)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAF-FEINE, WATER, FLTRD REC (UG/L) (50305)	CAR-BARYL WATER, FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER, FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS, DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)
AUG	13...	<.006	<.006	<.004	<.005	.012	<.010	--	<.002	--	E.018	<.020	<.005	<.018
	13...	--	--	--	--	--	--	E.3	--	2.7	<1	--	<.5	--
SEP	10...	<.006	<.006	<.004	<.005	<.007	<.010	--	<.002	--	E.126	<.020	<.005	<.018
Date	Time	DCPA WATER, FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON, WAT FLT 0.7 U GF, REC PERCENT (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-POTON WATER, FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER, FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN, WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER, FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOFOS WATER, DISS, REC (UG/L) (04095)	HCH ALPHA WAT FLT 0.7 U GF, REC PERCENT (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER, FLTRD 0.7 U GF, REC (UG/L) (82666)
AUG	13...	<.003	E.006	122	.035	<.005	<.02	<.010	<.009	<.005	<.003	104	<.004	<.035
	13...	--	--	--	M	--	--	--	--	--	--	--	--	--
SEP	10...	<.003	<.009	114	.048	<.005	<.02	<.002	<.009	<.005	<.003	109	<.004	<.035

E Estimated laboratory analysis value.
 e Estimated.
 M Presence of material verified but not quantified.

PLATTE RIVER BASIN

DROUGHT SYNOPTIC SAMPLING--Continued

06720500 SOUTH PLATTE RIVER AT HENDERSON, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	MALA- THION, DIS- SOLVED (UG/L) (39532)	METAL- AXYL WATER FLTRD 0.7 U REC (UG/L) (50359)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER FLTRD 0.7 U DISSOLV (UG/L) (39415)	METRI- BUZIN WATER FLTRD 0.7 U DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)
AUG 13...	<.027	--	<.050	<.006	E.010	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006
SEP 10...	<.027	--	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006
Date	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
AUG 13...	<.011	.02	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009
SEP 10...	<.011	.04	<.004	<.010	<.011	<.02	<.005	<.03	<.034	<.02	<.005	<.002	<.009
Date	DICHLOR VOS, WATER FLTRD REC (UG/L) (38775)												
AUG 13...	--												
SEP 10...	<1.00												
Date	1,4-DI- CHLORO- BENZENE DISSOLV (UG/L) (34572)	1METHYL NAPH- THALENE WATER, FLTRD REC (UG/L) (62054)	26DIMET NAPH- THALENE WATER, FLTRD REC (UG/L) (62055)	2METHYL NAPH- THALENE WATER, FLTRD REC (UG/L) (62056)	3-BETA- COPRO- STANOL, WATER, FLTRD REC (UG/L) (62057)	3METHYL 1(H)- INDOLE, WATER, FLTRD REC (UG/L) (62058)	3-TERT- BHA, WATER, FLTRD REC (UG/L) (62059)	4-CUMYL PHENOL, WATER, FLTRD REC (UG/L) (62060)	4-OCTYL PHENOL, WATER, FLTRD REC (UG/L) (62061)	4-TERT- OCTYL- PHENOL, WATER, FLTRD REC (UG/L) (62062)	5METHYL 1HBENZO TRIAZLE WATER, FLTRD REC (UG/L) (62063)	ACETO- PHENONE WATER, FLTRD REC (UG/L) (62064)	AHT NAPH- THALENE WATER, FLTRD REC (UG/L) (62065)
AUG 13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 10...	E.2	<.5	<.5	<.5	<2	<1	<5	<1	<1	M	E2	<.5	.8
Date	ANTHRA- CENE DISSOLV (UG/L) (34221)	ANTHRA- QUINONE WATER, FLTRD REC (UG/L) (62066)	BENZO- A- PYRENE DISSOLV (UG/L) (34248)	BENZO- PHENONE WATER, FLTRD REC (UG/L) (62067)	BETA- SITOS- TEROL, WATER, FLTRD REC (UG/L) (62068)	BISPHE- NOL A, WATER, FLTRD REC (UG/L) (62069)	BISPHE- NOL A-D3 SURRGTE S2033/ 8033 WAT FLT PERCENT (99583)	CAFFE- INE-C13 SURRGTE S2033/ 8033 DISSOLV (UG/L) (34288)	CAFFE- INE-C13 SURRGTE S2033/ 8033 WAT FLT PERCENT (99584)	CAMPHOR WATER, FLTRD REC (UG/L) (62070)	CARBA- ZOLE, WATER, FLTRD REC (UG/L) (62071)	CHOLE- TEROL, WATER, FLTRD REC (UG/L) (62072)	COT- ININE, WATER, FLTRD REC (UG/L) (62005)
AUG 13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 10...	<.5	E.1	<.5	E.2	<2	M	84.8	<.5	71.9	E.1	<.5	<2	M
Date	DCFLBI- PHENYL, SURRGTE S2033/ 8033 WAT FLT PERCENT (99585)	D-LIMO- NENE, WATER, FLTRD REC (UG/L) (62073)	FLUOR- ANTHENE DISSOLV (UG/L) (34377)	FLUORO- ANTHENE D10 SUR S2033/ 8033 WAT FLT PERCENT (99586)	HHMCP- BENZO- PYRAN, WATER, FLTRD REC (UG/L) (62075)	INDOLE, WATER, FLTRD REC (UG/L) (62076)	ISOBOR- NEOL, WATER, FLTRD REC (UG/L) (62077)	ISO- PHORONE DISSOLV (UG/L) (34409)	ISO- PROPYL BENZENE WATER, FLTRD REC (UG/L) (62078)	ISO- QUIN- OLINE, WATER, FLTRD REC (UG/L) (62079)	MENTHOL WATER, FLTRD REC (UG/L) (62080)	METHYL SALICY- LATE, WATER, FLTRD REC (UG/L) (62081)	DEET, WATER, FLTRD REC (UG/L) (62082)
AUG 13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 10...	59.1	<.5	<.5	62.9	E.1	<.5	<.5	<.5	<.5	<.5	E.3	<.5	E.4

E Estimated laboratory analysis value.
M Presence of material verified but not quantified.

DROUGHT SYNOPTIC SAMPLING--Continued

06720500 SOUTH PLATTE RIVER AT HENDERSON, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NAPHTH- ALENE DISSOLV (UG/L) (34443)	NONYL- PHENOL, DIETHOX WATER, FLTERD REC (UG/L) (62083)	DI- ETHOXY- OCTYL- PHENOL WAT FLT REC (UG/L) (61705)	MONO- ETHOXY- OCTYL- PHENOL WAT FLT REC (UG/L) (61706)	PARA- CRESOL, WATER, FLTERD REC (UG/L) (62084)	PARA- NONYL- PHENOL, WATER, FLTERD REC (UG/L) (62085)	PENTA- CHLORO- PHENOL DISSOLV (UG/L) (34459)	PHENAN - THREN V(UG/L) (34462)	PHENOL WATER FILTRD (UG/L) (34466)	PYRENE DISSOLV (UG/L) (34470)	STIGMA- STANOL, WATER, FLTERD REC (UG/L) (62086)	TETRA- CHLORO- ETHY- LENE DISSOLV (UG/L) (34476)	FYROL CEF, WATER, FLTERD REC (UG/L) (62087)
AUG 13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 13...	<.5	<5	M	E1	M	E2	<2	<.5	E.2	<.5	<2	<.5	E.3
SEP 10...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	FYROL PCF, WATER, FLTERD REC (UG/L) (62088)	TRIBUTL PHOS- PHATE, WATER, FLTERD REC (UG/L) (62089)	TRICLO- SAN, WATER, FLTERD REC (UG/L) (62090)	TRI- ETHYL CITRATE WATER, FLTERD REC (UG/L) (62091)	TRIPHNL PHOS- PHATE, WATER, FLTERD REC (UG/L) (62092)	TRIS(2- BUTOXE- PHOS- PHATE, WATER, FLTERD REC (UG/L) (62093)
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AUG 13...	--	--	--	--	--	--
AUG 13...	E.3	E.2	M	E.3	E.1	E3.2
SEP 10...	--	--	--	--	--	--

E Estimated laboratory analysis value.
M Presence of material verified but not quantified.

DROUGHT SYNOPTIC SAMPLING--Continued

402114105350101 BIG THOMPSON RIVER BELOW MORAINES PARK NEAR ESTES PARK, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°21'14", long 105°35'01", in SE¹/₄SW¹/₄ sec.33, T.5 N., R.73 W., Larimer County, Hydrologic Unit 10190006, on left upstream wingwall of bridge at lower Moraine Park parking lot, in Rocky Mountain National Park, and 4.0 mi southwest of Estes Park.

REMARKS.--Samples collected in vicinity of gage.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	CALCIUM SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SILICA, DIS-SOLVED (MG/L ST02) (00955)	SODIUM, SOLVED (MG/L AS NA) (00930)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	
AUG 07...	1040	29	17	7.2	15.3	9.5	7	6	1.48	.361	3.06	.82	1.4	
SEP 04...	1030	10	19	7.4	13.0	8.7	8	7	1.71	.448	3.84	1.04	1.9	
Date	Time	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688)
AUG 07...	<.30	68	E2.9	<.002	.190	<.015	.10	.10	.007	<.004	<.007	1.5	<.1	
SEP 04...	.33	111	4.0	<.002	.133	<.015	E.10	E.06	.006	E.002	<.007	1.5	<.1	
Date	Time	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	NITRO-GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	METHYL AZIN-OS, WAT FLT GF, REC (UG/L) (82686)	BEN-FLUR-ALIN, WAT FLD GF, REC (UG/L) (82673)	CAR-BARYL WATER, FLTRD GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)		
AUG 07...	.3	.3	<.02	<.006	<.004	<.006	<.007	<.050	<.010	<.002	<.041	<.020	<.005	
SEP 04...	.2	.2	<.02	<.006	<.004	E.002	<.007	<.050	<.010	<.002	<.041	<.020	<.005	
Date	Time	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	P,P' DDE DISSOLV (UG/L) (34653)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS DISS REC (UG/L) (04095)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	LINDANE DIS-SOLVED (UG/L) (39341)
AUG 07...	<.018	<.003	<.003	<.005	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	
SEP 04...	<.018	<.003	<.003	<.005	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	
Date	Time	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO-LACHLOR WATER FLTRD 0.7 U GF, REC (UG/L) (39415)	METRI-BUZIN WATER FLTRD 0.7 U GF, REC (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)
AUG 07...	<.035	<.027	<.006	<.013	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	<.01	
SEP 04...	<.035	<.027	<.006	<.013	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	<.01	
Date	Time	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)		
AUG 07...	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.005	<.002	<.009		
SEP 04...	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.005	<.002	<.009		

E Estimated laboratory analysis value.

DROUGHT SYNOPTIC SAMPLING--Continued

403048105042701 FOSSIL CREEK AT COLLEGE AVENUE, AT FORT COLLINS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°30'48", long 105°04'28", in SE¹/₄SE¹/₄ sec. 2, T. 6 N., R.69 W., Larimer County, Hydrologic Unit 10190007, on Fossil Creek at College Avenue in Fort Collins.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT.DIS FET LAB (MG/L CACO3) (29801)	
AUG 14...	1040	<.01	1450	8.1	17.5	7.1	620	135	69.2	87.4	2	2.27	314	
SEP 11...	1120	.09	2150	7.8	17.0	8.0	940	192	112	157	2	3.42	282	
Date	Time	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L AS) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT DAY) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	PHOS-PHORUS TOTAL DISS, (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)
AUG 14...	491	22.5	12.4	1010	1.38	--	E.004	.88	<.04	.15	<.06	<.06	<.02	
SEP 11...	964	23.7	10.2	1640	2.23	.40	.020	.99	<.04	.30	E.03	<.06	<.02	
Date	Time	IRON, DIS-SOLVED (UG/L AS FE) (01046)												
AUG 14...		<10												
SEP 11...		<10												
Date	Time	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	
AUG 14...		<.006	<.006	<.004	<.005	<.007	<.010	<.002	<.041	<.020	<.005	<.018	<.003	E.003
SEP 11...		<.006	<.006	<.004	<.005	.008	<.010	<.002	E.067	<.020	<.005	<.018	<.003	E.006
Date	Time	DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONO-FOS WATER DISS REC (UG/L) (04095)	HCH ALPHA WAT FLT 0.7 U GF, REC (91065)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (82686)
AUG 14...	87.8	<.005	<.005	<.02	<.002	<.009	<.005	<.003	94.4	<.004	<.035	<.027	<.050	
SEP 11...	120	.018	<.005	<.02	<.002	<.009	<.005	<.003	100	<.004	<.035	<.027	<.050	
Date	Time	METHYL PARA-THION WAT FLT 0.7 U GF, REC (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (82676)
AUG 14...		<.006	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006	<.011	.07	<.004
SEP 11...		<.006	E.004	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006	<.011	.06	<.004

E Estimated laboratory analysis value.

PLATTE RIVER BASIN

DROUGHT SYNOPTIC SAMPLING--Continued

403048105042701 FOSSIL CREEK AT COLLEGE AVENUE, AT FORT COLLINS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT GF, REC (UG/L) (82661)
AUG 14...	<.010	<.011	<.02	<.005	.03	<.034	<.02	<.005	<.002	<.009
SEP 11...	<.010	<.011	<.02	E.004	.02	<.034	<.02	<.005	<.002	<.009

E Estimated laboratory analysis value.

DROUGHT SYNOPTIC SAMPLING--Continued

402535105105700 BUCKHORN CREEK AT COUNTY ROAD 24, NEAR LOVELAND, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°25'35", long 105°10'57", in SE¹/₄SE¹/₄ sec. 1, T. 5 N., R. 70 W., Larimer County, Hydrologic Unit 10190007, on Buckhorn Creek 20 ft upstream from county road 24 bridge crossing, and 600 ft above mouth.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L) (00900)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	SODIUM, DIS-SOLVED (MG/L) (00930)	SODIUM AD-SORP-TION RATIO (00931)	SILICA, DIS-SOLVED (MG/L) (00955)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) (00613)	
SEP 30...	1030	.74	595	8.3	13.0	10.1	280	80.1	20.5	21.0	.5	15.0	<.008	
Date		NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)	NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L) (00625)	PHOS-PHORUS TOTAL (MG/L) (00665)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L) (00681)	ALUM-INUM, DIS-SOLVED (UG/L) (01106)	CADMIUM DIS-SOLVED (UG/L) (01025)	COPPER, DIS-SOLVED (UG/L) (01040)	IRON, DIS-SOLVED (UG/L) (01046)	LEAD, DIS-SOLVED (UG/L) (01049)	MANGA-NESE, DIS-SOLVED (UG/L) (01056)	SILVER, DIS-SOLVED (UG/L) (01075)
SEP 30...		.06	<.04	.18	.012	E.01	2.7	<20	<.04	1.3	20	E.04	14.3	<1
Date		ZINC, DIS-SOLVED (UG/L) (01090)												
SEP 30...		<1												

E Estimated laboratory analysis value.

PLATTE RIVER BASIN

DROUGHT SYNOPTIC SAMPLING--Continued

06741530 BIG THOMPSON RIVER AT I-25 NEAR LOVELAND, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°23'51", long 104°59'32", in NW¹/₄SW¹/₄ sec.15, T.5 N., R.68 W., Larimer County, Hydrologic Unit 10190006, at bridge on big Thompson River on north bound lane of service road, east of interstate Highway 25 (I-25), 1.5 mi downstream from Hillsboro Ditch, and 4.5 mi east of Loveland.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
AUG 08...	1150	30	376	8.4	22.0	79	7.1	150	41.6	12.3	15.7	.5	1.73
SEP 12...	0900	3.4	774	8.1	17.0	16	6.4	310	72.8	31.1	39.9	1	3.33

Date	ALKA-LINITY WAT.DIS FET LAB (MG/L CACO3) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NO2+NO3 SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMONIA + DIS-SOLVED (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)
AUG 08...	72	99.3	5.38	241	225	.33	19.8	1.11	.035	1.2	.48	.184	.162
SEP 12...	110	255	13.8	553	499	.75	5.13	3.70	.022	.57	.47	.46	.414

Date	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)
AUG 08...	.7	1.6	E6	E.06	19.6	<.01	1.11	<1
SEP 12...	1.0	2.5	18	.11	46.8	<.01	2.74	<1

Date	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLUR-ALIN, WAT FLD 0.7 U GF, REC (UG/L) (82673)	BRO-MACIL, WATER, DISS, REC (UG/L) (04029)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAF-FEINE, WATER FLTRD REC (UG/L) (50305)	CAR-BARYL, WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN, WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS, DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)
AUG 08...	<.006	<.006	<.004	<.005	.008	<.010	<.5	<.002	E.1	E.007	<.020	<.005	<.018
SEP 12...	<.006	<.006	<.004	<.005	.043	<.010	<.5	<.002	E.1	E.004	<.020	<.005	<.018

Date	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL-ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON, D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON, WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN, WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP, WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	HCH ALPHA, FONOFOS WATER DISS, REC (UG/L) (04095)	D6 SRG, WAT FLT 0.7 U GF, REC PERCENT (91065)	LINDANE, DIS-SOLVED (UG/L) (39341)	LIN-URON, WATER FLTRD 0.7 U GF, REC (UG/L) (82666)
AUG 08...	<.003	E.005	119	.012	<.005	<.02	<.002	<.009	<.005	<.003	102	<.004	<.035
SEP 12...	<.003	E.013	104	.005	<.005	<.02	<.002	<.009	<.005	<.003	104	<.004	<.035

E Estimated laboratory analysis value.

DROUGHT SYNOPTIC SAMPLING--Continued

06741530 BIG THOMPSON RIVER AT I-25 NEAR LOVELAND, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	MALA-THION, DIS-SOLVED (UG/L) (39532)	METAL-AXYL WATER FLTRD REC (UG/L) (50359)	METHYL-AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL-PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	
AUG 08...	<.027	<.5	<.050	<.006	E.005	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006	
SEP 12...	<.027	<.5	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006	
Date	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PRO-PA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	
AUG 08...	<.011	E.01	<.005	<.010	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009	
SEP 12...	<.011	.03	<.004	<.010	<.011	<.02	<.005	E.01	<.034	<.02	<.005	<.002	<.009	
Date	1,4-DI-CHLORO-BENZENE DISSOLV (UG/L) (34572)	1METHYL-NAPH-THALENE WATER, FLTRD REC (UG/L) (62054)	26DIMET-NAPH-THALENE WATER, FLTRD REC (UG/L) (62055)	2METHYL-NAPH-THALENE WATER, FLTRD REC (UG/L) (62056)	3-BETA-STANOL, WATER, REC (UG/L) (62057)	3METHYL-1(H)-INDOLE, WATER, REC (UG/L) (62058)	3-TERT-BHA, WATER, REC (UG/L) (62059)	DICHLOR VOS, WATER FLTRD REC (UG/L) (38775)	4-CUMYL-PHENOL, WATER, REC (UG/L) (62060)	4-OCTYL-PHENOL, WATER, REC (UG/L) (62061)	4-TERT-OCTYL-PHENOL, WATER, REC (UG/L) (62062)	5METHYL-1HBENZO-TRIAZLE WATER, REC (UG/L) (62063)	ACETO-PHENONE WATER, REC (UG/L) (62064)	AHT-NAPH-THALENE WATER, REC (UG/L) (62065)
AUG 08...	<.5	<.5	<.5	<.5	<2	<1	<5	<1	<1	<1	<1	<2	<.5	E.1
SEP 12...	<.5	<.5	<.5	<.5	M	<1	<5	<1	<1	<1	<1	<2	<.5	E.1
Date	ANTHRA-CENE FLTRD REC (UG/L) (34221)	ANTHRA-QUINONE WATER, FLTRD REC (UG/L) (62066)	BENZO-PYRENE DISSOLV (UG/L) (34248)	BENZO-PHENONE WATER, FLTRD REC (UG/L) (62067)	BETA-SITOS-TEROL, WATER, REC (UG/L) (62068)	BISPHE-NOL A, WATER, REC (UG/L) (62069)	BISPHEN-OL A-D3 SURRGTE S2033/8033 PERCENT (99583)	CAFFE-INE-C13 SURRGTE S2033/8033 PERCENT (99584)	BROMO-FORM DISSOLV (UG/L) (34288)	CAMPHOR WATER, FLTRD REC (UG/L) (62070)	CARBA-ZOLE, WATER, FLTRD REC (UG/L) (62071)	CHOLES-TEROL, WATER, FLTRD REC (UG/L) (62072)	COT-ININE, WATER, FLTRD REC (UG/L) (62005)	
AUG 08...	<.5	<.5	<.5	M	<2	<1	52.0	<.5	79.3	<.5	<.5	<2	<1	
SEP 12...	<.5	<.5	<.5	M	M	<1	64.9	<.5	83.7	M	<.5	M	<1	
Date	DCFLBI-PHENYL, SURRGTE S2033/8033 WAT FLT PERCENT (99585)	D-LIMO-NENE, WATER, FLTRD REC (UG/L) (62073)	FLUOR-ANTHENE DISSOLV (UG/L) (34377)	FLUORO-ANTHENE D10 SUR S2033/8033 WAT FLT PERCENT (99586)	HHMCP-BENZO-PYRAN, WATER, FLTRD REC (UG/L) (62075)	INDOLE, WATER, FLTRD REC (UG/L) (62076)	ISOBOR-NEOL, WATER, FLTRD REC (UG/L) (62077)	ISO-PHORONE DISSOLV (UG/L) (34409)	ISO-PROPYL-BENZENE WATER, FLTRD REC (UG/L) (62078)	ISO-QUIN-OLINE, WATER, FLTRD REC (UG/L) (62079)	METHOL WATER, FLTRD REC (UG/L) (62080)	METHYL-SALICY-LATE, WATER, FLTRD REC (UG/L) (62081)	DEET, WATER, FLTRD REC (UG/L) (62082)	
AUG 08...	61.1	<.5	<.5	68.0	M	<.5	<.5	<.5	<.5	<.5	<.5	<.5	E.1	
SEP 12...	63.0	<.5	<.5	64.5	M	<.5	<.5	<.5	<.5	<.5	<.5	<.5	M	

E Estimated laboratory analysis value.
M Presence of material verified but not quantified.

PLATTE RIVER BASIN

DROUGHT SYNOPTIC SAMPLING--Continued

06741530 BIG THOMPSON RIVER AT I-25 NEAR LOVELAND, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NAPHTH- ALENE DISSOLV (UG/L) (34443)	NONYL- PHENOL, DIETHOX WATER, FLTERD REC (UG/L) (62083)	DI- ETHOXY- OCTYL- PHENOL WAT FLT REC (UG/L) (61705)	MONO- ETHOXY- OCTYL- PHENOL WAT FLT REC (UG/L) (61706)	PARA- CRESOL, WATER, FLTERD REC (UG/L) (62084)	PARA- NONYL- PHENOL, WATER, FLTERD REC (UG/L) (62085)	PENTA- CHLORO- PHENOL DISSOLV (UG/L) (34459)	PHENAN - THREN EDISSOL V(UG/L) (34462)	PHENOL WATER FILTRD (UG/L) (34466)	PYRENE DISSOLV (UG/L) (34470)	STIGMA- STANOL, WATER, FLTERD REC (UG/L) (62086)	TETRA- CHLORO- ETHY- LENE DISSOLV (UG/L) (34476)	FYROL CEF, WATER, FLTERD REC (UG/L) (62087)
AUG 08...	<.5	<5	<1	<1	<1	<5	<2	<.5	E.3	<.5	<2	<.5	M
SEP 12...	<.5	E1	<1	<1	<1	<5	<2	<.5	.9	<.5	<2	<.5	E.1
						TRIBUTL FYROL PCF, WATER, FLTERD REC (UG/L) (62088)	PHOS- PHATE, WATER, FLTERD REC (UG/L) (62089)	TRICLO- SAN, WATER, FLTERD REC (UG/L) (62090)	TRI- ETHYL CITRATE WATER, FLTERD REC (UG/L) (62091)	TRIPHNL PHOS- PHATE, WATER, FLTERD REC (UG/L) (62092)	TRIS(2- BUTOXE- PHOS- PHATE, WATER, FLTERD REC (UG/L) (62093)		
AUG 08...				E.1	E.1	M	<.5	E.1	<.5				
SEP 12...				E.1	M	M	M	M	E.3				

E Estimated laboratory analysis value.

M Presence of material verified but not quantified.

DROUGHT SYNOPTIC SAMPLING--Continued

06752260 CACHE LA POUFRE RIVER AT FORT COLLINS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat. 40°35'21", Long. 105°04'09", in SE 1/4 of NW 1/4 sec. 12, T.7 N., R.69 W., Larimer County, Hydrologic Unit 10190007, on left bank approximately 100 ft upstream from Lincoln St. Bridge in Ft. Collins.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	E COLI, MTEC MF (COL/100 ML) (31633)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	
Date		SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)
Date			CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	
JUL 31...	1545	16		192	8.4	25.0	7.8	>160	80	22.8	5.57	6.38	.3	75
SEP 12...	1525	9.5		394	8.1	20.5	8.2	800	180	51.0	12.6	10.6	.3	137
JUL 31...	15.9	4.55		.2	5.8	111	<.008	.043	<.04	<.06	<.02	5	<2	<.1
SEP 12...	55.2	7.19		.4	9.7	242	E.007	.107	<.04	<.06	<.02	3	E1	<.1
JUL 31...		<.8		1.6	410	<10	<1	46	<.01	<2.0	<.3	<.1	<1	
SEP 12...		<.8		1.1	210	32	<1	36	<.01	E1.2	.4	<.1	2	

E Estimated laboratory analysis value.

DROUGHT SYNOPTIC SAMPLING--Continued

06752280 CACHE LA POUVRE RIVER ABOVE BOXELDER CREEK NEAR TIMNATH, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°33'07", long 105°00'39", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.28, T.7 N., R.68 W., Larimer County, Hydrologic Unit 10190007, on left bank 4,000 ft upstream from Boxelder Creek, 2.0 mi upstream from Interstate Highway 25 bridge, and 3.8 mi southeast of intersection of College Avenue and Prospect Street in Fort Collins.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD WATER UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L) CACO3 (00900)	CALCIUM DIS-SOLVED (MG/L) AS CA (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) AS MG (00925)	SODIUM, DIS-SOLVED (MG/L) AS NA (00930)	SODIUM AD-SORP-TION RATIO (00931)	ALKA-LINITY WAT.DIS FET LAB (MG/L) CACO3 (29801)	ANC UNFLTRD TIT 4.5 LAB (MG/L) AS CACO3 (90410)	
JUL 31...	1345	2.4	1100	8.3	27.5	9.6	490	128	41.8	50.0	1	144	146	
SEP 12...	1250	3.8	853	7.9	21.0	7.6	400	106	33.2	39.2	.9	167	165	
Date	Time	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	CHLO-RIDE, DIS-SOLVED (MG/L) AS CL (00940)	FLUO-RIDE, DIS-SOLVED (MG/L) AS F (00950)	SILICA, DIS-SOLVED (MG/L) AS SIO2 (00955)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	NITRO-GEN, DIS-SOLVED (MG/L) AS N (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	PHOS-PHORUS, DIS-SOLVED (MG/L) AS P (00666)	ORTHO-PHATE, DIS-SOLVED (MG/L) AS P (00671)	ALUM-INUM, DIS-SOLVED (UG/L) AS AL (01106)	ARSENIC, DIS-SOLVED (UG/L) AS AS (01000)	CADMIUM, DIS-SOLVED (UG/L) AS CD (01025)
JUL 31...	432	15.8	.70	8.2	839	.013	.217	<.04	.07	.07	3	E1	<.1	
SEP 12...	299	15.8	.59	9.6	659	.032	.636	<.04	.10	.08	1	<2	E.1	
Date	Time	CHRO-MIUM, DIS-SOLVED (UG/L) AS CR (01030)	COPPER, DIS-SOLVED (UG/L) AS CU (01040)	IRON, TOTAL RECOV-ERABLE (UG/L) AS FE (01045)	IRON, DIS-SOLVED (UG/L) AS FE (01046)	LEAD, DIS-SOLVED (UG/L) AS PB (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L) AS MN (01055)	MERCURY, DIS-SOLVED (UG/L) AS HG (71890)	NICKEL, DIS-SOLVED (UG/L) AS NI (01065)	SELE-NIUM, DIS-SOLVED (UG/L) AS SE (01145)	SILVER, DIS-SOLVED (UG/L) AS AG (01075)	ZINC, DIS-SOLVED (UG/L) AS ZN (01090)		
JUL 31...		<.8	5.6	270	E6	<1	89	<.01	<2.0	2.7	<.2	2		
SEP 12...		<.8	2.2	250	12	<1	77	<.01	E1.5	3.0	<.1	3		
Date	Time	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER, FLTRD (UG/L) (49260)	ALA-CHLOR, WATER, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, REC (UG/L) (39632)	BEN-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82673)	BRO-MACIL, WATER, DISS, REC (UG/L) (04029)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAF-NEINE, WATER, FLTRD (UG/L) (50305)	CAR-BARYL, WATER, FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN, WATER, FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS, DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)
JUL 31...		<.006	<.006	<.004	<.005	E.004	<.010	<.5	<.002	<.5	<.041	<.020	<.005	<.018
SEP 12...		<.006	<.006	<.004	<.005	.011	<.010	<.5	<.002	E.4	E.142	<.020	<.005	<.018
Date	Time	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON, DI0 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-POTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONO-FOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (91065)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)
JUL 31...		<.003	E.009	100	E.004	<.005	<.02	<.002	<.009	<.005	<.003	96.7	<.004	<.035
SEP 12...		<.003	E.010	97.2	<.005	<.005	<.02	<.002	<.009	<.005	<.003	103	<.004	<.035
Date	Time	MALA-THION, DIS-SOLVED (UG/L) (39532)	METAL-AXYL WATER FLTRD REC (UG/L) (50359)	METHYL PARA-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PARA-THION, DIS-SOLVED (UG/L) (34653)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	
JUL 31...		<.027	<.5	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006
SEP 12...		<.027	<.5	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006

E Estimated laboratory analysis value.

DROUGHT SYNOPTIC SAMPLING--Continued

06752280 CACHE LA POUFRE RIVER ABOVE BOXELDER CREEK NEAR TIMNATH, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, 0.7 U REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, 0.7 U REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, 0.7 U REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
JUL 31...	<.011	.04	<.004	<.010	<.011	<.02	<.005	E.02	<.034	<.02	<.005	<.002	<.009
SEP 12...	<.011	.04	--	<.010	<.011	<.02	<.008	.02	<.034	<.02	<.005	<.002	<.009
Date							DICHLOR VOS, WATER FLTRD REC (UG/L) (38775)						
JUL 31...							<1.00						
SEP 12...							<1.00						
Date	1,4-DI- CHLORO- BENZENE DISSOLV (UG/L) (34572)	1METHYL NAPH- THALENE WATER, FLTRD REC (UG/L) (62054)	26DIMET NAPH- THALENE WATER, FLTRD REC (UG/L) (62055)	2METHYL NAPH- THALENE WATER, FLTRD REC (UG/L) (62056)	3-BETA- COPRO- STANOL, WATER, FLTRD REC (UG/L) (62057)	3METHYL 1(H)- INDOLE, WATER, FLTRD REC (UG/L) (62058)	3-TERT- BHA, WATER, FLTRD REC (UG/L) (62059)	4-CUMYL PHENOL, WATER, FLTRD REC (UG/L) (62060)	4-OCTYL PHENOL, WATER, FLTRD REC (UG/L) (62061)	4-TERT- OCTYL- PHENOL, WATER, FLTRD REC (UG/L) (62062)	5METHYL 1HBENZO TRIAZLE WATER, FLTRD REC (UG/L) (62063)	ACETO- PHENONE WATER, FLTRD REC (UG/L) (62064)	AHT NAPH- THALENE WATER, FLTRD REC (UG/L) (62065)
JUL 31...	<.5	<.5	<.5	<.5	<2	<1	<5	<1	<1	<1	<2	<.5	<.5
SEP 12...	<.5	<.5	<.5	<.5	<2	<1	<5	<1	<1	<1	<2	E.2	<.5
Date	ANTHRA- CENE DISSOLV (UG/L) (34221)	ANTHRA- QUINONE WATER, FLTRD REC (UG/L) (62066)	BENZO- A- PYRENE DISSOLV (UG/L) (34248)	BENZO- PHENONE WATER, FLTRD REC (UG/L) (62067)	BETA- SITOS- TEROL, WATER, FLTRD REC (UG/L) (62068)	BISPHE- NOL A, WATER, FLTRD REC (UG/L) (62069)	BISPHEN OL A-D3 SURRGTE S2033/ 8033 WAT FLT (99583)	BROMO- FORM DISSOLV (UG/L) (34288)	CAFFE- INE-C13 SURRGTE S2033/ 8033 WAT FLT (99584)	CAMPHOR WATER, FLTRD REC (UG/L) (62070)	CARBA- ZOLE, WATER, FLTRD REC (UG/L) (62071)	CHOLES- TEROL, WATER, FLTRD REC (UG/L) (62072)	COT- ININE, WATER, FLTRD REC (UG/L) (62005)
JUL 31...	<.5	<.5	<.5	M	<2	<1	89.7	<.5	84.1	<.5	<.5	<2	<1
SEP 12...	<.5	E.1	<.5	<.5	<2	<1	86.4	<.5	91.4	M	<.5	<2	<1
Date	DCFLBI- PHENYL, SURRGTE S2033/ 8033 WAT FLT PERCENT (99585)	D-LIMO- NENE, WATER, FLTRD REC (UG/L) (62073)	FLUORO- ANTHENE DISSOLV (UG/L) (34377)	FLUORO- ANTHENE DI0 SUR S2033/ 8033 WAT FLT PERCENT (99586)	HHMCP- BENZO- PYRAN, WATER, FLTRD REC (UG/L) (62075)	INDOLE, WATER, FLTRD REC (UG/L) (62076)	ISOBOR- NEOL, WATER, FLTRD REC (UG/L) (62077)	ISO- PHORONE DISSOLV (UG/L) (34409)	ISO- PROPYL BENZENE WATER, FLTRD REC (UG/L) (62078)	ISO- QUIN- OLINE, WATER, FLTRD REC (UG/L) (62079)	MENTHOL WATER, FLTRD REC (UG/L) (62080)	METHYL SALICY- LATE, WATER, FLTRD REC (UG/L) (62081)	DEET, WATER, FLTRD REC (UG/L) (62082)
JUL 31...	54.0	<.5	<.5	71.8	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	E.4
SEP 12...	84.8	M	<.5	76.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	E.1
Date	NAPHTH- ALENE DISSOLV (UG/L) (34443)	NONYL- PHENOL, DIETHOX WATER, FLTRD REC (UG/L) (62083)	DI- ETHOXY- OCTYL- PHENOL WAT FLT REC (UG/L) (61705)	MONO- ETHOXY- OCTYL- PHENOL WAT FLT REC (UG/L) (61706)	PARA- CRESOL, WATER, FLTRD REC (UG/L) (62084)	PARA- NONYL- PHENOL, WATER, FLTRD REC (UG/L) (62085)	PENTA- CHLORO- PHENOL DISSOLV (UG/L) (34459)	PHENAN - THREN V(UG/L) (34462)	PHENOL WATER FILTRD (UG/L) (34466)	PYRENE DISSOLV (UG/L) (34470)	STIGMA- STANOL, WATER, FLTRD REC (UG/L) (62086)	TETRA- CHLORO- ETHY- LENE DISSOLV (UG/L) (34476)	FYROL CEF, WATER, FLTRD REC (UG/L) (62087)
JUL 31...	<.5	<5	<1	<1	<1	<5	<2	<.5	<.5	<.5	<2	<.5	M
SEP 12...	<.5	<5	<1	<1	<1	<5	<2	<.5	E.2	<.5	<2	<.5	E.1

E Estimated laboratory analysis value.
M Presence of material verified but not quantified.

PLATTE RIVER BASIN

DROUGHT SYNOPTIC SAMPLING--Continued

06752280 CACHE LA POUFRE RIVER ABOVE BOXELDER CREEK NEAR TIMNATH, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	FYROL PCF, WATER, FLTERD REC (UG/L) (62088)	TRIBUTL PHOS- PHATE, WATER, FLTERD REC (UG/L) (62089)	TRICLO- SAN, WATER, FLTERD REC (UG/L) (62090)	TRI- ETHYL CITRATE WATER, FLTERD REC (UG/L) (62091)	TRIPHNL PHOS- PHATE, WATER, FLTERD REC (UG/L) (62092)	TRIS(2- BUTOXE- PHOS- PHATE, WATER, FLTERD REC (UG/L) (62093)
JUL 31...	<.5	E.1	<1	<.5	E.1	<.5
SEP 12...	M	<.5	M	<.5	M	E.4

E Estimated laboratory analysis value.

M Presence of material verified but not quantified.

DROUGHT SYNOPTIC SAMPLING--Continued

06753990 LONETREE CREEK NEAR GREELEY, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°26'33", long 104°35'18", in NE¹/₄NW¹/₄ sec.31, T.6 N., R.64 W., Weld County, Hydrologic Unit 10190008, on right bank 50 ft downstream from bridge on Weld County Road 62 ¹/₂, 5.5 mi east of Greeley.

REMARKS.--Samples collected in vicinity of gage.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	BICAR-BONATE WATER DIS IT (MG/L AS HCO3) (00453)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CACO3) (39086)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SILICA, DIS-SOLVED AS (MG/L AS ST02) (00955)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	
AUG 06...	0940	.11	1830	8.4	22.0	13.2	336	280	204	62.2	25.7	125	642	
Date		CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, INOR-GANIC, PARTIC-ULATE TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC, PARTIC-ULATE TOTAL (MG/L AS C) (00689)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)
AUG 06...	45.9	<10	10.2	.146	12.4	E.02	.77	.071	.04	5.3	<.1	.4	.4	
Date		NITRO-GEN, PAR-TICULTE WAT FLT SUSP (MG/L AS N) (49570)	ACETO-CHLOR, WATER, FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	DEETHYL-ZINE, WATER, DISS, REC (UG/L) (04040)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	METHYL-AZIN-OS, WAT FLT GF, REC (UG/L) (82686)	BEN-FLUR-ALIN, WAT FLD GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL, WATER, FLTRD GF, REC (UG/L) (82680)	CARBO-FURAN, WATER, FLTRD GF, REC (UG/L) (82674)	CHLOR-PYRIFOS, DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA, WATER, FLTRD GF, REC (UG/L) (82682)
AUG 06...	.07	<.006	<.004	E.103	.092	<.050	<.010	<.002	<.041	<.020	<.005	<.018	.005	
Date		P,P' DDE DISSOLV (UG/L) (34653)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, SOLVED (UG/L) (39381)	2,6-DI-ETHYL ANILINE, WAT FLT GF, REC (UG/L) (82660)	DISUL-FOTON, WATER, FLTRD GF, REC (UG/L) (82677)	EPTC, WATER, FLTRD GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN, WAT FLT GF, REC (UG/L) (82663)	ETHO-PROP, WATER, FLTRD GF, REC (UG/L) (82672)	FONO-FOS, WATER, DISS, REC (UG/L) (04095)	ALPHA-BHC, SOLVED (UG/L) (34253)	LINDANE, DIS-SOLVED (UG/L) (39341)	LIN-URON, WATER, FLTRD GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)
AUG 06...	E.002	<.005	<.005	<.006	<.02	.004	<.009	<.005	<.003	<.005	<.004	<.035	<.027	
Date		METHYL-PARA-THION, WAT FLT 0.7 U GF, REC (82667)	METO-LACHLOR, WATER, DISSOLV (UG/L) (39415)	METRI-SEN-COR, WATER, DISSOLV (UG/L) (82630)	MOL-INATE, WATER, FLTRD GF, REC (UG/L) (82671)	NAPROP-AMIDE, WATER, FLTRD GF, REC (UG/L) (82684)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE, WATER, FILTRD GF, REC (UG/L) (82669)	PENDI-METH-ALIN, WAT FLT GF, REC (UG/L) (82683)	PER-CIS, METHRIN, WAT FLT GF, REC (UG/L) (82687)	PHORATE, WATER, FLTRD GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE, WATER, FLTRD GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)
AUG 06...	<.006	.027	<.006	<.002	<.007	<.010	<.004	.053	<.006	<.011	.06	<.004	<.010	
Date		PRO-PANIL, WATER, FLTRD 0.7 U GF, REC (82679)	PRO-PARGITE, WATER, FLTRD 0.7 U GF, REC (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON, WATER, FLTRD GF, REC (UG/L) (82670)	TER-BACIL, WATER, FLTRD GF, REC (UG/L) (82665)	TER-BUFOS, WATER, FLTRD GF, REC (UG/L) (82675)	THIO-BENCARB, WATER, FLTRD GF, REC (UG/L) (82681)	TRIAL-LATE, WATER, FLTRD GF, REC (UG/L) (82678)	TRI-FLUR-ALIN, WAT FLT GF, REC (UG/L) (82661)	ALA-CHLOR, ESA, WAT FLT GF, REC (50009)	ACETO-CHLOR, ESA, FLTRD GF, REC (61029)	ACETO-CHLOR, OA, FLTRD GF, REC (61030)	ALA-CHLOR, OA, FLTRD GF, REC (61031)
AUG 06...	<.011	.20	.005	<.02	<.034	<.02	<.005	<.002	<.009	1.17	<.05	<.05	<.05	
Date				METOLA-CHLOR, ESA, FLTRD 0.7 UM GF REC (61043)	METOLA-CHLOR, OA, FLTRD 0.7 UM GF REC (61044)	DIMETH-ENAMID, ESA, WAT FLT (UG/L) (61951)	FLUFEN-ACET, ESA, WAT FLT (UG/L) (61952)	DIMETH-ENAMID, WATER, FLT, REC (UG/L) (62482)	FLUFE-NACET, OA, WATER, FLT, REC (UG/L) (62483)					
AUG 06...				1.36	.42	<.05	<.05	<.05	<.05					

E Estimated laboratory analysis value.

DROUGHT SYNOPTIC SAMPLING--Continued

06754000 SOUTH PLATTE RIVER NEAR KERSEY, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°24'44", long 104°33'46", in NW¹/₄SW¹/₄ sec.9, T.5 N., R.64W., Weld County, Hydrologic Unit 10190003, on downstream side of bridge on State Highway 37, 1.9 mi north of railroad in Kersey, and 2.5 mi downstream from Cache la Poudre River.

REMARKS.--Samples collected in vicinity of gage.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD TEMPER-ATURE WATER (DEG C) (00400)	OXYGEN, DIS-SOLVED (MG/L) (00300)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS) (00453)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS) (39086)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	SILICA, DIS-SOLVED (MG/L) (00955)	SODIUM, DIS-SOLVED (MG/L) (00930)	SULFATE DIS-SOLVED (MG/L) (00945)		
AUG 08...	1030	113	1510	7.9	22.3	7.6	256	210	126	54.5	14.2	116	440	
SEP 03...	1050	73	1660	8.1	19.0	10.8	294	241	143	57.0	14.0	138	496	
03...	1051	--	--	--	--	--	--	--	--	--	--	--	--	
Date		CHLO-RIDE, DIS-SOLVED (MG/L) (00940)	IRON, DIS-SOLVED (UG/L) (01046)	MANGA-NESE, DIS-SOLVED (UG/L) (01056)	NITRO-GEN, DIS-SOLVED (MG/L) (00613)	NITRO-GEN, NO2+NO3 (MG/L) (00631)	NITRO-GEN, AMMONIA (MG/L) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L) (00625)	PHOS-PHORUS DIS-SOLVED (MG/L) (00665)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L) (00681)	CARBON, INOR-GANIC, PARTIC. ULATE TOTAL (MG/L) (00688)	CARBON, ORGANIC PARTIC. ULATE TOTAL (MG/L) (00689)	CARBON, INORG + ORGANIC PARTIC. ULATE TOTAL (MG/L) (00694)
AUG 08...	80.2	<10	177	.212	6.03	1.81	3.3	.79	.54	6.9	.2	4.0	4.2	
SEP 03...	86.2	20	167	.288	7.36	.90	2.7	.81	.55	4.3	<.1	1.2	1.2	
03...	--	--	--	--	--	--	--	--	--	--	--	--	--	
Date		NITRO-GEN, PAR-TICULATE WAT FLT SUSP (MG/L) (49570)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	METHYL AZIN-OS, WAT FLT GF, REC (UG/L) (82686)	BEN-FLUR-ALIN WAT FLD GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL, WATER FLTRD GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD GF, REC (UG/L) (82674)	CHLOR-PYRIFOS, DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD GF, REC (UG/L) (82682)
AUG 08...	.68	<.006	<.004	E.088	.091	<.050	<.010	<.002	E.070	<.020	<.005	<.018	.004	
SEP 03...	.24	<.006	<.004	E.095	.087	<.050	<.010	<.002	<.041	<.020	<.005	<.018	<.003	
03...	--	--	--	--	--	--	--	--	<1	--	<.5	--	--	
Date		P,P', DDE DISSOLV (UG/L) (34653)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	2,6-DI-ETHYL ANILINE WAT FLT GF, REC (UG/L) (82660)	DISUL-FOTON WATER FLTRD GF, REC (UG/L) (82677)	EPTC WATER FLTRD GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT GF, REC (UG/L) (82663)	ETHO-PROP-ALIN WATER FLTRD GF, REC (UG/L) (82672)	FONO-FOS WATER DISS, REC (UG/L) (04095)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	LINDANE, DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)
AUG 08...	<.003	.041	<.005	<.006	<.02	<.005	<.009	<.005	<.003	<.005	<.004	<.004	<.035	E.008
SEP 03...	<.003	<.005	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005	<.004	<.004	<.035	<.027
03...	--	<.5	--	--	--	--	--	--	--	--	--	--	--	--
Date		METHYL PARA-THION WAT FLT GF, REC (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD GF, REC (UG/L) (82684)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT GF, REC (UG/L) (82683)	PER-METHRIN CIS WATER WAT FLT GF, REC (UG/L) (82687)	PHORATE WATER FLTRD GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)
AUG 08...	.019	.064	<.006	<.002	<.007	<.010	<.004	.036	<.006	<.011	.06	<.004	<.010	
SEP 03...	<.006	.018	<.006	<.002	<.007	<.010	<.004	<.022	<.006	<.011	.05	<.004	<.010	
03...	--	M	--	--	--	--	--	--	--	--	<.5	--	--	

E Estimated laboratory analysis value.

M Presence of material verified but not quantified.

DROUGHT SYNOPTIC SAMPLING--Continued

06754000 SOUTH PLATTE RIVER NEAR KERSEY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	1,4-DI-CHLORO-BENZENE DISSOLV (UG/L) (34572)	1METHYL-NAPH-THALENE WATER, REC (UG/L) (62054)	26DIMET-NAPH-THALENE WATER, REC (UG/L) (62055)	FLUOR-ANTHENE DISSOLV (UG/L) (34377)
AUG 08...	<.011	<.03	.005	E.02	<.034	<.02	<.005	<.002	<.009	<.5	<.5	<.5	<.5
SEP 03...	<.011	<.02	.006	E.01	<.034	<.02	<.005	<.002	<.009	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	<.5	<.5	<.5	<.5
Date	HHH MCP-BENZO-PYRAN, WATER, FLTRD REC (UG/L) (62075)	2METHYL-NAPH-THALENE WATER, FLTRD REC (UG/L) (62056)	INDOLE, WATER, FLTRD REC (UG/L) (62076)	3-BETA-COPRO-STANOL, WATER, FLTRD REC (UG/L) (62057)	ISOBOR-NEOL, WATER, FLTRD REC (UG/L) (62077)	3METHYL 1(H)-INDOLE, WATER, FLTRD REC (UG/L) (62058)	ISO-PHORONE DISSOLV (UG/L) (34409)	3-TERT-BHA, WATER, FLTRD REC (UG/L) (62059)	ISO-PROPYL BENZENE, WATER, FLTRD REC (UG/L) (62078)	4-CUMYL PHENOL, WATER, FLTRD REC (UG/L) (62060)	ISO-QUIN-OLINE, WATER, FLTRD REC (UG/L) (62079)	4-OCTYL PHENOL, WATER, FLTRD REC (UG/L) (62061)	MENTHOL WATER, FLTRD REC (UG/L) (62080)
AUG 08...	<.5	<.5	<.5	<2	<.5	<1	<.5	<5	<.5	<1	<.5	<1	<.5
SEP 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	M	<.5	<.5	<2	<.5	<1	<.5	<5	<.5	<1	<.5	<1	<.5
Date	4-TERT-OCTYL-PHENOL, WATER, FLTRD REC (UG/L) (62062)	METAL-AXYL WATER, FLTRD REC (UG/L) (50359)	5METHYL 1HBENZO-TRIAZLE WATER, FLTRD REC (UG/L) (62063)	METHYL SALICY-LATE, WATER, FLTRD REC (UG/L) (62081)	ACETO-PHENONE WATER, FLTRD REC (UG/L) (62064)	DEET, WATER, FLTRD REC (UG/L) (62082)	AHT-NAPH-THALENE WATER, FLTRD REC (UG/L) (62065)	NAPHTH-ALENE DISSOLV (UG/L) (34443)	ANTHRA-CENE DISSOLV (UG/L) (34221)	NONYL-PHENOL, DIETHOX WATER, FLTRD REC (UG/L) (62083)	ANTHRA-QUINONE WATER, FLTRD REC (UG/L) (62066)	DI-ETHOXY-OCTYL-PHENOL WATER FLT REC (UG/L) (61705)	BENZO-A-PYRENE DISSOLV (UG/L) (34248)
AUG 08...	<1	M	<2	<.5	<.5	E.1	M	<.5	M	E3	E.1	M	<.5
SEP 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	<1	<.5	<2	<.5	<.5	M	M	<.5	<.5	<5	<.5	<1	<.5
Date	MONO-ETHOXY-OCTYL-PHENOL WAT FLT REC (UG/L) (61706)	BENZO-PHENONE WATER, FLTRD REC (UG/L) (62067)	PARA-CRESOL, WATER, FLTRD REC (UG/L) (62084)	BETA-SITOS-TEROL, WATER, FLTRD REC (UG/L) (62068)	PARA-NONYL-PHENOL, WATER, FLTRD REC (UG/L) (62085)	STIGMA-STANOL, WATER, FLTRD REC (UG/L) (62086)	PENTA-CHLORO-PHENOL DISSOLV (UG/L) (34459)	BISPHE-NOL A, WATER, FLTRD REC (UG/L) (62069)	PHENAN-THREN EDISSOL V (UG/L) (34462)	BRO-MACIL, WATER, DISS (UG/L) (04029)	PHENOL WATER, FILTRD REC (UG/L) (34466)	BROMO-FORM DISSOLV (UG/L) (34288)	PYRENE DISSOLV (UG/L) (34470)
AUG 08...	E1	M	<1	<2	<5	<2	<2	<1	M	<.5	<.5	<.5	<.5
SEP 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	M	<.5	<1	<2	<5	<2	<2	<1	<.5	<.5	<.5	<.5	<.5
Date	CAF-FEINE WATER, FLTRD REC (UG/L) (50305)	TETRA-CHLORO-ETHY-LENE DISSOLV (UG/L) (34476)	CAMPHOR WATER, FLTRD REC (UG/L) (62070)	TRIS(2-BUTOXE-PHOS-PHATE, WATER, FLTRD REC (UG/L) (62093)	CARBA-ZOLE, WATER, FLTRD REC (UG/L) (62071)	FYROL-CEF, WATER, FLTRD REC (UG/L) (62087)	CHOLES-TEROL, WATER, FLTRD REC (UG/L) (62072)	TRIBUTL PHOS-PHATE, WATER, FLTRD REC (UG/L) (62089)	COT-ININE, WATER, FLTRD REC (UG/L) (62005)	TRICLO-SAN, WATER, FLTRD REC (UG/L) (62090)	D-LIMO-NENE, WATER, FLTRD REC (UG/L) (62073)	TRI-ETHYL CITRATE, WATER, FLTRD REC (UG/L) (62091)	DICHLOR VOS, WATER, FLTRD REC (UG/L) (38775)
AUG 08...	E.2	<.5	E.1	<.5	<.5	E.1	<2	E.1	<1	<1	<.5	<.5	<1.00
SEP 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	M	<.5	<.5	E.2	<.5	M	M	<.5	<1	<1	<.5	<.5	<1.00
Date	TRIPHNL PHOS-PHATE, WATER, FLTRD REC (UG/L) (62092)	FYROL PCF, WATER, FLTRD REC (UG/L) (62088)											
AUG 08...	E.1	E.1											
SEP 03...	--	--											
03...	M	M											

E Estimated laboratory analysis value.
M Presence of material verified but not quantified.

PLATTE RIVER BASIN

DROUGHT SYNOPTIC SAMPLING--Continued

06758500 SOUTH PLATTE RIVER NEAR WELDONA, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°19'19", long 108°55'17" in SW¹/₄SW¹/₄ sec.7, T.4 N., R.58 W., Morgan County, Hydrologic Unit 10190003, on left bank 500 ft downstream from bridge on State Highway 144, 2.8 mi southeast of Weldona, and 4.2 mi upstream from Bijou Creek.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	
AUG 02...	1145	e86	1710	8.4	20.5	11.0	E110	600	143	59.5	170	3	9.46	
SEP 17...	1125	e192	1570	8.3	18.5	8.9	--	520	127	49.6	132	3	8.42	
Date	Time	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
AUG 02...	224	562	97.9	1.09	13.9	1290	1210	1.76	.046	3.44	E.011	.88	.130	
SEP 17...	244	475	83.7	1.05	13.4	1130	1060	1.54	.024	3.79	<.015	.73	.28	
Date	Time	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM, DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM, DIS-SOLVED (UG/L AS LI) (01130)
AUG 02...	.049	.037	--	45.9	<.5	310	E.1	<.8	.70	3.3	<10	E.06	43.0	
SEP 17...	.19	.189	4.3	43.5	<.5	280	<.1	<.8	.72	3.5	E5	.17	33.4	
Date	Time	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)					
AUG 02...		40.1	7.4	4.23	5	<1	1660	3.8	3					
SEP 17...		22.9	8.1	6.27	4	<1	1420	3.2	24					

E Estimated laboratory analysis value.
e Estimated.

DROUGHT SYNOPTIC SAMPLING--Continued

06764000 SOUTH PLATTE RIVER AT JULESBURG, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40 58' 46", long 102 15' 15", in NW¹/₄NE¹/₄ and NE¹/₄SE¹/₄ (two channels) sec. 33, T. 12 N., R.44 W., Sedgewick County, Hydrologic Unit 10190018, on left bank of channel 4 (left channel) 215 ft downstream from bridge, on right bank of channel 2, 5 ft downstream from bridge on U.S. Highway 385, and on left bank of channel 1, 5 ft upstream from bridge on U.S. Highway 385, 0.9 mi southeast of Julesburg, 3.0 mi upstream from Colorado-Nebraska State line, and 8 mi downstream from Lodgepole Creek.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L) AS CACO3 (00900)	CALCIUM DIS-SOLVED (MG/L) AS CA (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) AS MG (00925)	SODIUM, DIS-SOLVED (MG/L) AS NA (00930)	SODIUM AD-TION RATIO (00931)	SILICA, DIS-SOLVED (MG/L) AS SIO2 (00955)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) AS N (00613)	
SEP 19...	1325	e18	2080	8.4	21.0	11.0	720	195	57.3	196	3	25.4	.043	
Date		NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	NITRO-GEN, AMONIA + ORGANIC TOTAL (MG/L) AS N (00625)	PHOS-PHORUS TOTAL (MG/L) AS P (00665)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L) AS P (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L) AS C (00681)	ALUM-INUM, DIS-SOLVED (UG/L) AS AL (01106)	CADMIUM DIS-SOLVED (UG/L) AS CD (01025)	COPPER, DIS-SOLVED (UG/L) AS CU (01040)	IRON, DIS-SOLVED (UG/L) AS FE (01046)	LEAD, DIS-SOLVED (UG/L) AS PB (01049)	MANGA-NESE, DIS-SOLVED (UG/L) AS MN (01056)	SILVER, DIS-SOLVED (UG/L) AS AG (01075)
SEP 19...		3.62	.07	.47	.024	<.02	3.9	<20	E.03	3.7	<10	<.08	7.9	<1
								ZINC, DIS-SOLVED (UG/L) AS ZN (01090)						
								SEP 19...						4

E Estimated laboratory analysis value.
e Estimated.

DROUGHT SYNOPTIC SAMPLING--Continued

The U.S. Geological Survey (USGS) conducted a synoptic water-quality study during July, August, and September 2002, to characterize water-quality conditions in all of the major river basins in Colorado during the current drought. A tiered sampling approach with common core constituents at all sampling locations was used, facilitating statewide comparisons of water-quality conditions. Additional site-specific parameters were added to the core list depending on local water-quality issues and land use.

07086000 ARKANSAS RIVER AT GRANITE, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°02'34", long 106°15'55", in SE¹/₄SW¹/₄ sec.31, T.11 S., R.79 W., Chaffee County, Hydrologic Unit 11020001, on right bank at Granite, 100 ft east of U.S. Highway 24, 100 ft downstream from county bridge, and 200 ft upstream from Cache Creek.

DRAINAGE AREA.--427 mi².

PERIOD OF RECORD.--October 1967 to June 1969, October 1993 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L) (00935)	SODIUM, DIS-SOLVED (MG/L) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L) AS (90410)	FLUO-RIDE, DIS-SOLVED (MG/L) AS F) (00950)	SULFATE DIS-SOLVED (MG/L) AS SO4) (00945)
JUL 19...	1640	126	6.8	8.3	129	21.5	14.5	4.58	.76	3.24	42	E.10	19.2
AUG 26...	1340	139	7.5	7.4	105	17.0	12.6	3.47	.68	2.47	34	.16	15.9

Date	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L) AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) AS N) (00613)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L) AS P) (00671)	PHOS-PHORUS TOTAL (MG/L) (00665)	E COLI, MTEC MF (COL/100 ML) (31633)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)	ALUM-INUM, DIS-SOLVED (UG/L) AS AL) (01106)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L) AS AL) (01105)	ARSENIC DIS-SOLVED (UG/L) AS AS) (01000)	ARSENIC TOTAL (UG/L) AS AS) (01002)	BORON, DIS-SOLVED (UG/L) AS B) (01020)
JUL 19...	<.04	.13	<.05	<.008	<.02	.009	e4	<3	20	40	<2	<2	E8.3
AUG 26...	<.04	.13	<.05	<.008	<.02	.007	e2	e2	20	50	<2	<2	<13

Date	CADMIUM DIS-SOLVED (UG/L) AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L) AS CD) (01027)	COPPER, DIS-SOLVED (UG/L) AS CU) (01040)	COPPER, TOTAL RECOV-ERABLE (UG/L) AS CU) (01042)	IRON, DIS-SOLVED (UG/L) AS FE) (01046)	IRON, TOTAL RECOV-ERABLE (UG/L) AS FE) (01045)	LEAD, DIS-SOLVED (UG/L) AS PB) (01049)	LEAD, TOTAL RECOV-ERABLE (UG/L) AS PB) (01051)	MANGA-NESE, DIS-SOLVED (UG/L) AS MN) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L) AS MN) (01055)	SILVER, DIS-SOLVED (UG/L) AS AG) (01075)	SILVER, TOTAL RECOV-ERABLE (UG/L) AS AG) (01077)	ZINC, DIS-SOLVED (UG/L) AS ZN) (01090)
JUL 19...	E.1	.1	E1.1	1.8	51	120	<1	2	9.5	20.4	E.1	<.3	<24
AUG 26...	E.1	.1	--	--	28	110	<1	1	10.7	22.6	<.1	<.3	<24

Date	ZINC, TOTAL RECOV-ERABLE (UG/L) AS ZN) (01092)
JUL 19...	40
AUG 26...	E20

e Estimated value.
E Estimated laboratory analysis value.

DROUGHT SYNOPTIC SAMPLING--Continued

07096000 ARKANSAS RIVER AT CANON CITY, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°26'02", long 105°15'24", in SE¹/₄SE¹/₄ sec.31, T.18 S., R.70 W., Fremont County, Hydrologic Unit 11020002, on right bank 800 ft upstream from Sand Creek, 0.7 mi downstream from Grape Creek, and 0.7 mi upstream from First Street Bridge at Canon City.

DRAINAGE AREA.--3,117 mi².

PERIOD OF RECORD.--November 1963 to September 1968, October 1970 to January 1977, April 1990 to March 1993, October 1993 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)
JUL 31...	1215	171	8.4	8.5	244	22.5	29.2	6.72	1.56	10.2	88	7.17	.45
AUG 26...	1000	175	8.3	8.2	239	19.5	27.6	6.33	1.63	9.36	84	--	.43

Date	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	ORTHOPHOSPHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	COLIFORM, FECAL, UM-MF (COLS./100 ML) (31625)	ALUMINUM, DIS-SOLVED (UG/L AS AL) (01106)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ARSENIC, DIS-SOLVED (UG/L AS AS) (01000)	ARSENIC, TOTAL (UG/L AS AS) (01002)
JUL 31...	24.4	<.04	.27	<.05	<.008	<.02	.033	e3	e2	<20	140	<2	4
AUG 26...	25.5	<.04	.21	<.05	<.008	<.02	.023	e9	16	<20	70	<2	<13

Date	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM, DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)
JUL 31...	20	<.1	E.1	E.8	1.7	15	190	<1	1	7.7	28.5	<.1	<.3
AUG 26...	10	<.1	<.1	--	--	13	110	<1	E1	7.7	25.4	<.1	<.3

Date	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
JUL 31...	<24	--
AUG 26...	<24	<20

e Estimated value.
 E Estimated laboratory analysis value.

ARKANSAS RIVER BASIN

DROUGHT SYNOPTIC SAMPLING--Continued

07097000 ARKANSAS RIVER AT PORTLAND, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°23'18", long 105°00'56", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.20, T.19 S., R.68 W., Fremont County, Hydrologic Unit 11020002, on right bank at upstream side of bridge on State Highway 120 at Portland, and 1 mi downstream from Hardscrabble Creek.

DRAINAGE AREA.--4,024 mi².

PERIOD OF RECORD.--September 1970 to September 1971, October 1975 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L) (00935)	SODIUM, DIS-SOLVED (MG/L) (00930)	ANC UNFLTRD LAB TIT 4.5 (MG/L) (90410)	CHLO-RIDE, DIS-SOLVED (MG/L) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L) (00950)	
JUL 31...	1345	139	12.9	8.7	472	27.0	52.6	14.8	2.77	27.0	127	9.82	.57	
AUG 26...	1115	150	9.4	8.5	520	21.0	55.7	15.5	2.79	29.9	131	--	.59	
Date	Time	SULFATE DIS-SOLVED (MG/L) (00945)	NITRO-GEN, AMMONIA + DIS-SOLVED (MG/L) (00608)	NITRO-GEN, AM-MONIA + DIS-SOLVED (MG/L) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) (00613)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L) (00671)	PHOS-PHORUS TOTAL (MG/L) (00665)	CARBON, ORGANIC DIS-SOLVED (MG/L) (00681)	CARBON, ORGANIC TOTAL (MG/L) (00680)	E COLI, MTEC MF (COL/100 ML) (31633)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)	ALUM-INUM, DIS-SOLVED (UG/L) (01106)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L) (01105)
JUL 31...	106	<.04	.49	.05	E.004	E.01	.087	2.6	4.4	290	230	<20	440	
AUG 26...	119	<.04	.39	.16	E.005	.07	.142	2.5	3.3	e54	100	<20	340	
Date	Time	ARSENIC DIS-SOLVED (UG/L) (01000)	ARSENIC TOTAL (UG/L) (01002)	BORON, DIS-SOLVED (UG/L) (01020)	CADMIUM DIS-SOLVED (UG/L) (01025)	CADMIUM UNFLTRD TOTAL (UG/L) (01027)	COPPER, DIS-SOLVED (UG/L) (01040)	COPPER, TOTAL RECOV-ERABLE (UG/L) (01042)	IRON, DIS-SOLVED (UG/L) (01046)	IRON, TOTAL RECOV-ERABLE (UG/L) (01045)	LEAD, DIS-SOLVED (UG/L) (01049)	LEAD, TOTAL RECOV-ERABLE (UG/L) (01051)	MANGA-NESE, DIS-SOLVED (UG/L) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L) (01055)
JUL 31...	2	E1	50	<.1	E.1	E1.1	2.7	11	650	<1	2	18.9	76.6	
AUG 26...	<2	<13	50	<.1	E.1	--	--	E9	500	<1	1	29.0	76.6	
Date	Time	SILVER, DIS-SOLVED (UG/L) (01075)	SILVER, TOTAL RECOV-ERABLE (UG/L) (01077)	ZINC, DIS-SOLVED (UG/L) (01090)	ZINC, TOTAL RECOV-ERABLE (UG/L) (01092)	1,4-DI-CHLORO-BENZENE DISSOLV (UG/L) (34572)	1METHYL-NAPH-THALENE FILTERD REC (UG/L) (62054)	26DIMET-NAPH-THALENE FILTERD REC (UG/L) (62055)	2METHYL-NAPH-THALENE FILTERD REC (UG/L) (62056)	3-BETA-COPRO-STANOL, WATER, FILTERD REC (UG/L) (62057)	3METHYL-1(H)-INDOLE, WATER, FILTERD REC (UG/L) (62058)	3-TERT-BHA, WATER, FILTERD REC (UG/L) (62059)	4-CUMYL-PHENOL, WATER, FILTERD REC (UG/L) (62060)	4-OCTYL-PHENOL, WATER, FILTERD REC (UG/L) (62061)
JUL 31...	<.2	<.3	<24	--	<.5	<.50	<.50	<.50	<2	<1	<5	<1	<1	
AUG 26...	<.1	<.3	<24	<20	E.1	E.03	E.02	E.05	<2	<1	<5	<1	<1	
Date	Time	4-TERT-OCTYL-PHENOL, WATER, FLTRERD REC (UG/L) (62062)	5METHYL-1H-BENZO-TRIAZLE WATER, FLTRERD REC (UG/L) (62063)	ACETO-PHENONE WATER, FLTRERD REC (UG/L) (62064)	AHT-NAPH-THALENE WATER, FLTRERD REC (UG/L) (62065)	ANTHRA-CENE DISSOLV (UG/L) (34221)	ANTHRA-QUINONE WATER, FLTRERD REC (UG/L) (62066)	BENZO-A-PYRENE DISSOLV (UG/L) (34248)	BENZO-PHENONE WATER, FLTRERD REC (UG/L) (62067)	BETA-SITOS-TEROL, WATER, FLTRERD REC (UG/L) (62068)	BISPHE-NOL A, WATER, FLTRERD REC (UG/L) (62069)	BRO-MACIL, WATER, DISS, FORM (UG/L) (04029)	BROMO-FORM DISSOLV (UG/L) (34288)	CAF-FEINE, WATER, FLTRERD REC (UG/L) (50305)
JUL 31...	<1	<2	<.5	<.50	<.5	<.5	<.5	<.50	<2	<1	<.5	<.5	<.5	
AUG 26...	<1	<2	<.5	E.05	<.5	<.5	<.5	E.01	<2	<1	<.5	<.5	<.5	

e Estimated value.

E Estimated laboratory analysis value.

DROUGHT SYNOPTIC SAMPLING--Continued

07097000 ARKANSAS RIVER AT PORTLAND, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	CAMPHOR WATER, FLTRD REC (UG/L) (62070)	CARBARYL WATER, 0.7 U GF, REC (UG/L) (82680)	CARBAZOLE, WATER, FLTRD REC (UG/L) (62071)	CHLOROPYRIFOS DIS-SOLVED (UG/L) (38933)	CHOLESTEROL, WATER, FLTRD REC (UG/L) (62072)	COTININE, WATER, FLTRD REC (UG/L) (62005)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	D-LIMONENE, WATER, FLTRD REC (UG/L) (62073)	FLUORANTHENE DISSOLV (UG/L) (34377)	HHHMCP-BENZO-PYRAN, WATER, FLTRD REC (UG/L) (62075)	INDOLE, WATER, FLTRD REC (UG/L) (62076)	ISOBORNEOL, WATER, FLTRD REC (UG/L) (62077)	ISO-PHORONE DISSOLV (UG/L) (34409)
JUL 31...	<.5	<1	<.5	<.5	<2	<1	<.5	<.5	<.5	<.50	<.5	<.5	E.2
AUG 26...	<.5	<1	<.5	<.5	<2	<1	<.5	E.7	<.5	E.01	<.5	<.5	<.5

Date	ISO-PROPYL BENZENE WATER, FLTRD REC (UG/L) (62078)	ISO-QUINOLINE, WATER, FLTRD REC (UG/L) (62079)	MENTHOL WATER, FLTRD REC (UG/L) (62080)	METAL-AXYL WATER, FLTRD REC (UG/L) (50359)	METHYL SALICY-LATE, WATER, FLTRD REC (UG/L) (62081)	METO-LACHLOR WATER, DISSOLV (UG/L) (39415)	DEET, WATER, REC (UG/L) (62082)	NAPHTH-ALENE DISSOLV (UG/L) (34443)	NONYL-PHENOL, DIETHOX WATER, REC (UG/L) (62083)	DI-ETHOXY-OCTYL-PHENOL REC (UG/L) (61705)	MONO-ETHOXY-OCTYL-PHENOL REC (UG/L) (61706)	PARA-CRESOL, WATER, FLTRD REC (UG/L) (62084)	PARA-NONYL-PHENOL, WATER, FLTRD REC (UG/L) (62085)
JUL 31...	<.5	<.5	.7	<.5	<.50	<.5	E.03	<.5	<5	<1	<1	<1	<5
AUG 26...	E.3	<.5	<.5	<.5	E.05	<.5	<.50	E.3	<5	<1	<1	<1	E1

Date	PENTA-CHLORO-PHENOL DISSOLV (UG/L) (34459)	PHENAN-THREN EDISSOLV V(UG/L) (34462)	PHENOL WATER, FLTRD (UG/L) (34466)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PYRENE DISSOLV (UG/L) (34470)	STIGMA-STANOL, WATER, FLTRD REC (UG/L) (62086)	TETRA-CHLORO-ETHY-LENE DISSOLV (UG/L) (34476)	FYROL CEF, WATER, FLTRD REC (UG/L) (62087)	FYROL PCF, WATER, FLTRD REC (UG/L) (62088)	TRIBUTYL PHOS-PHATE, WATER, FLTRD REC (UG/L) (62089)	TRICLO-SAN, WATER, FLTRD REC (UG/L) (62090)	TRI-ETHYL CITRATE, WATER, FLTRD REC (UG/L) (62091)	TRIPHNL PHOS-PHATE, WATER, FLTRD REC (UG/L) (62092)
JUL 31...	<2	<.50	<.5	<.5	<.5	<2	<.5	E.06	E.07	<.5	<1	<.5	<.5
AUG 26...	<2	E.03	E.2	<.5	<.5	<2	E.1	E.02	E.02	<.5	<1	<.5	<.5

Date	TRIS(2-BUTOXE-PHOS-PHATE, WATER, FLTRD REC (UG/L) (62093)	DICHLOR VOS, WATER, FLTRD REC (UG/L) (38775)
JUL 31...	<.5	<1.00
AUG 26...	<.5	<1.00

E Estimated laboratory analysis value.

ARKANSAS RIVER BASIN

DROUGHT SYNOPTIC SAMPLING--Continued

PUEBLO RESERVOIR NEAR PUEBLO, CO

WATER-QUALITY RECORDS

381647104475300 PUEBLO RESERVOIR SITE 4B

LOCATION (REVISED).--Lat 38°16'47", long 104°47'53", in NW¹/₄SE¹/₄ sec.29, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, at approximate center of transect approximately 1.3 mi upstream from Peck Creek, 2.2 mi downstream from Turkey Creek, 4.5 mi upstream from Pueblo Dam on Arkansas River, and 10.9 mi west of the Pueblo County Courthouse.

DRAINAGE AREA.--4,669 mi².

PERIOD OF RECORD.--June 1988 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SAM- PLING DEPTH (FEET) (00003)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
JUL							
22...	1319	--	.46	--	--	--	--
22...	1320	.10	--	6.9	8.1	623	25.8
22...	1323	6.00	--	6.7	8.0	618	25.7
22...	1326	12.0	--	5.8	7.8	628	25.2
22...	1328	14.0	--	3.9	7.6	630	24.2
AUG							
27...	1429	--	.30	--	--	--	--
27...	1430	.10	--	9.9	8.6	626	23.9
27...	1433	6.00	--	7.6	8.3	630	23.2
27...	1435	11.0	--	7.0	8.2	633	23.0
SEP							
26...	1214	--	.46	--	--	--	--
26...	1215	.10	--	10.6	8.6	632	19.1
26...	1218	6.00	--	9.2	8.5	634	18.8
26...	1221	10.0	--	7.1	8.3	654	18.3

DROUGHT SYNOPTIC SAMPLING--Continued

PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

WATER-QUALITY RECORDS

381559104465500 PUEBLO RESERVOIR SITE 5C

LOCATION (REVISED)--Lat 38°15'59", long 104°46'55", in SW¹/₄NE¹/₄ sec.33, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, at approximate center of transect approximately 0.1 mi upstream from Peck Creek, 1.2 mi upstream from Rock Creek, 3.2 mi upstream from Pueblo Dam on Arkansas River, and 9.6 mi west of the Pueblo County Courthouse.

PERIOD OF RECORD--June 1988 to current year.

REMARKS--Chlorophyll samples were composited from samples collected at the surface, at the transparency depth (secchi disk), and at twice the transparency depth.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SAM-PLING DEPTH (FEET) (00003)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	NITRO-GEN, AM-MONIA SOLVED (MG/L) AS N (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L) AS N (00623)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) AS N (00613)	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00666)
JUL												
22...	1139	--	1.52	--	--	--	--	--	--	--	--	--
22...	1140	.10	--	6.8	8.2	592	25.1	E.011	.19	.157	.011	.005
22...	1141	3.00	--	6.7	8.2	593	25.0	E.012	.19	.156	.011	.006
22...	1142	6.00	--	6.6	8.2	595	24.9	.021	.18	.162	.011	.005
22...	1143	9.00	--	6.2	8.1	599	24.6	--	--	--	--	--
22...	1144	12.0	--	5.8	8.1	599	24.5	--	--	--	--	--
22...	1146	15.0	--	5.6	8.0	600	24.4	--	--	--	--	--
22...	1147	18.0	--	5.5	8.0	601	24.4	--	--	--	--	--
22...	1148	21.0	--	5.5	8.0	601	24.4	--	--	--	--	--
22...	1149	24.0	--	3.5	7.7	600	23.9	--	--	--	--	--
22...	1152	27.0	--	2.9	7.6	597	23.6	--	--	--	--	--
22...	1154	28.0	--	2.8	7.6	598	23.6	--	--	--	--	--
AUG												
27...	1254	--	.91	--	--	--	--	--	--	--	--	--
27...	1255	.10	--	7.7	8.5	634	22.8	E.009	.19	.056	.006	.007
27...	1257	3.00	--	7.6	8.5	634	22.8	E.009	.17	.055	.005	.008
27...	1258	6.00	--	7.6	8.5	634	22.8	E.012	.21	.053	.006	.006
27...	1259	9.00	--	7.4	8.4	634	22.7	--	--	--	--	--
27...	1301	12.0	--	7.3	8.4	634	22.7	--	--	--	--	--
27...	1302	15.0	--	7.1	8.4	636	22.6	--	--	--	--	--
27...	1303	18.0	--	7.0	8.4	638	22.5	--	--	--	--	--
27...	1304	19.0	--	7.0	8.4	640	22.4	--	--	--	--	--
SEP												
26...	1057	--	.61	--	--	--	--	--	--	--	--	--
26...	1058	.10	--	7.5	8.3	639	19.0	.018	.21	.083	.007	.007
26...	1059	3.00	--	7.5	8.3	638	19.0	.015	.21	.081	.007	.006
26...	1101	6.00	--	7.4	8.3	638	18.9	.022	.21	.081	.007	.006
26...	1102	9.00	--	7.4	8.3	638	18.8	--	--	--	--	--
26...	1103	12.0	--	7.3	8.3	638	18.8	--	--	--	--	--
26...	1104	15.0	--	7.0	8.3	638	18.6	--	--	--	--	--
26...	1106	18.0	--	7.1	8.3	639	18.5	--	--	--	--	--
26...	1108	19.0	--	7.1	8.3	639	18.5	--	--	--	--	--

E Estimated laboratory analysis value.

ARKANSAS RIVER BASIN
 DROUGHT SYNOPTIC SAMPLING--Continued
 PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued
 381559104465500 PUEBLO RESERVOIR SITE 5C--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	PHEO- PHYTIN A, PHYTO- PHYTON (UG/L) (62360)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
JUL						
22...	--	--	--	--	--	--
22...	<.007	.017	--	--	--	E1.2
22...	<.007	.018	--	--	--	E.9
22...	<.007	.032	--	--	--	4.7
22...	--	--	--	2.0	12.7	--
AUG						
27...	--	--	--	--	--	--
27...	<.007	.028	V2.5	--	--	<2.0
27...	<.007	.027	--	--	--	<2.0
27...	<.007	.030	V2.6	--	--	E.9
27...	--	--	--	--	--	--
SEP						
26...	--	--	--	--	--	--
26...	<.007	.032	V2.7	--	--	--
26...	<.007	.033	--	--	--	--
26...	<.007	.027	V2.6	--	--	--
26...	--	--	--	--	--	--

E Estimated laboratory analysis value.

V Analyte was detected in both the environmental sample and the associated blanks.

DROUGHT SYNOPTIC SAMPLING--Continued

PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

WATER-QUALITY RECORDS

381548104453300 PUEBLO RESERVOIR SITE 6C

LOCATION (REVISED).--Lat 38°15'48", long 104°45'33", in NE¹/₄ SE¹/₄ sec.34, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, at approximate center of transect approximately 0.2 mi downstream from Rock Creek, 1.2 mi downstream from Peck Creek, 2.0 mi upstream from Pueblo Dam on Arkansas River, and 8.4 mi west of the Pueblo County Courthouse.

PERIOD OF RECORD.--June 1988 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SAM- PLING DEPTH (FEET) (00003)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
JUL							
22...	1109	--	1.68	--	--	--	--
22...	1110	.10	--	6.7	8.2	589	24.8
22...	1111	6.00	--	6.7	8.2	589	24.5
22...	1112	12.0	--	6.4	8.2	589	24.3
22...	1113	18.0	--	6.2	8.1	590	24.1
22...	1114	24.0	--	6.0	8.1	590	24.1
22...	1115	30.0	--	1.1	7.4	592	22.3
22...	1117	36.0	--	.6	7.3	593	21.8
22...	1118	42.0	--	.4	7.3	596	21.1
22...	1120	48.0	--	.2	7.2	598	20.5
22...	1122	52.0	--	.0	7.2	600	20.0
AUG							
27...	1224	--	1.22	--	--	--	--
27...	1225	.10	--	7.2	8.4	636	22.4
27...	1226	6.00	--	7.0	8.4	636	22.4
27...	1228	12.0	--	7.0	8.4	636	22.4
27...	1229	18.0	--	6.7	8.4	637	22.4
27...	1230	24.0	--	6.5	8.3	636	22.2
27...	1231	30.0	--	6.3	8.3	636	22.0
27...	1232	36.0	--	4.3	8.0	637	21.8
27...	1233	42.0	--	3.8	7.9	638	21.6
27...	1235	45.0	--	3.5	7.9	638	21.6
SEP							
26...	1029	--	.76	--	--	--	--
26...	1030	.10	--	6.8	8.2	638	19.1
26...	1031	6.00	--	6.8	8.2	639	19.0
26...	1032	12.0	--	6.6	8.2	639	18.9
26...	1033	18.0	--	6.6	8.2	639	18.9
26...	1034	24.0	--	6.6	8.2	639	18.9
26...	1035	30.0	--	6.7	8.2	639	18.9
26...	1036	36.0	--	6.8	8.2	639	18.8
26...	1037	40.0	--	6.9	8.2	639	18.8
26...	1038	44.0	--	6.8	8.2	639	18.8

ARKANSAS RIVER BASIN

DROUGHT SYNOPTIC SAMPLING--Continued

PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

WATER-QUALITY RECORDS

381602104435200 PUEBLO RESERVOIR SITE 7B

LOCATION (REVISED).--Lat 38°16'02", long 104°43'52", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.36, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, at approximate center of transect approximately 0.3 mi downstream from Boggs Creek, 0.4 mi upstream from Pueblo Dam on Arkansas River, and 6.8 mi west of the Pueblo County Courthouse.

PERIOD OF RECORD.--June 1988 to current year.

REMARKS.--Chlorophyll samples were composited from samples collected at the surface, at the transparency depth (secchi disk), and at twice the transparency depth.

Date	Time	SAM- PLING DEPTH (FEET) (00003)	TRANS- PAR- ENCY (SECCHI DISK) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
JUL							
22...	0859	--	2.44	--	--	--	--
22...	0929	.10	--	6.5	8.2	587	24.3
22...	0931	3.00	--	6.6	8.2	586	24.2
22...	0932	6.00	--	6.7	8.2	587	24.1
22...	0933	9.00	--	6.8	8.2	587	24.0
22...	0934	12.0	--	6.7	8.2	587	24.0
22...	0935	15.0	--	6.7	8.2	587	24.0
22...	0936	18.0	--	6.7	8.2	587	23.9
22...	0937	21.0	--	6.5	8.1	588	23.7
22...	0938	24.0	--	6.4	8.1	588	23.6
22...	0939	27.0	--	5.9	8.0	589	23.3
22...	0940	30.0	--	5.0	7.8	591	23.1
22...	0942	33.0	--	2.8	7.5	594	21.9
22...	0943	36.0	--	2.3	7.4	594	21.6
22...	0944	39.0	--	2.1	7.4	594	21.5
22...	0946	42.0	--	1.9	7.4	596	21.4
22...	0947	45.0	--	1.6	7.3	596	20.9
22...	0948	48.0	--	1.3	7.3	596	20.4
22...	0949	51.0	--	1.2	7.3	596	20.2
22...	0950	54.0	--	1.1	7.3	596	20.0
22...	0951	57.0	--	1.0	7.3	591	19.0
22...	0952	60.0	--	.9	7.2	589	18.4
22...	0953	63.0	--	.6	7.2	586	17.6
22...	0954	66.0	--	.3	7.2	583	16.7
22...	0955	69.0	--	.1	7.1	583	16.4
22...	0957	72.0	--	.0	7.1	582	16.2
AUG							
27...	0859	--	2.44	--	--	--	--
27...	1105	.10	--	5.9	8.1	634	21.5
27...	1107	3.00	--	5.9	8.1	634	21.5
27...	1108	6.00	--	5.9	8.1	634	21.5
27...	1109	9.00	--	5.9	8.1	634	21.5
27...	1110	12.0	--	5.9	8.1	634	21.5
27...	1111	15.0	--	5.9	8.1	634	21.5
27...	1112	18.0	--	5.8	8.1	634	21.5
27...	1113	21.0	--	5.8	8.1	634	21.5
27...	1114	24.0	--	5.8	8.1	634	21.5
27...	1116	27.0	--	5.8	8.1	634	21.5
27...	1117	30.0	--	5.8	8.1	634	21.5
27...	1118	33.0	--	5.6	8.1	634	21.5
27...	1119	36.0	--	5.6	8.1	634	21.5
27...	1120	39.0	--	5.5	8.1	634	21.5
27...	1121	42.0	--	4.8	8.0	634	21.5
27...	1122	45.0	--	4.4	8.0	634	21.4
27...	1123	48.0	--	3.5	7.9	634	21.3
27...	1124	51.0	--	3.4	7.9	634	21.3
27...	1125	54.0	--	3.2	7.8	634	21.3
27...	1126	57.0	--	3.0	7.8	634	21.2
27...	1127	60.0	--	2.8	7.8	634	21.2
27...	1128	63.0	--	2.5	7.8	633	21.1
27...	1129	66.0	--	1.8	7.7	632	21.0
27...	1130	69.0	--	1.5	7.7	632	20.9
SEP							
26...	0859	--	1.07	--	--	--	--
26...	0916	.10	--	5.9	8.0	637	18.6
26...	0917	3.00	--	5.9	8.0	637	18.8
26...	0918	6.00	--	5.9	8.0	637	18.8
26...	0919	9.00	--	5.9	8.0	637	18.8
26...	0920	12.0	--	5.9	8.0	637	18.8
26...	0921	15.0	--	5.9	8.0	637	18.8
26...	0922	18.0	--	5.9	8.0	637	18.8
26...	0923	21.0	--	5.8	8.0	637	18.8
26...	0924	24.0	--	5.8	8.0	637	18.8
26...	0925	27.0	--	5.8	8.0	637	18.8
26...	0926	30.0	--	5.8	8.0	637	18.8
26...	0927	33.0	--	5.8	8.0	637	18.8
26...	0928	36.0	--	5.8	8.0	637	18.8
26...	0929	39.0	--	5.8	8.0	637	18.8
26...	0931	42.0	--	5.8	8.0	637	18.8
26...	0932	45.0	--	5.8	8.0	637	18.8
26...	0933	48.0	--	5.8	8.0	637	18.8
26...	0934	51.0	--	5.8	8.0	637	18.8
26...	0935	54.0	--	5.8	8.0	637	18.8
26...	0936	57.0	--	5.8	8.0	637	18.8
26...	0937	60.0	--	5.8	8.0	637	18.8
26...	0938	63.0	--	5.8	8.0	637	18.8
26...	0939	66.0	--	5.7	8.0	637	18.8
26...	0940	69.0	--	5.6	8.0	637	18.8

DROUGHT SYNOPTIC SAMPLING--Continued

PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

381602104435200 PUEBLO RESERVOIR SITE 7B--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SAM-PLING DEPTH (FEET) (00003)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L) AS N (00623)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) AS N (00613)	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00666)
JUL													
22...	0859	--	2.44	--	--	--	--	--	--	--	--	--	--
22...	0900	.10	--	--	6.5	8.2	587	24.3	<.015	.17	.209	.010	E.003
22...	0930	18.0	--	--	6.7	8.2	587	23.9	E.013	.18	.384	.011	E.003
22...	0945	54.0	--	--	1.1	7.3	596	20.0	.025	.19	.299	.011	E.003
22...	1015	72.0	--	--	.0	7.1	582	16.2	E.012	.20	.330	.011	E.003
22...	1045	--	--	1.7	--	--	--	--	--	--	--	--	--
AUG													
27...	0859	--	2.44	--	--	--	--	--	--	--	--	--	--
27...	0900	.10	--	--	5.9	8.1	634	21.5	E.008	.17	.169	.003	.005
27...	0915	67.0	--	--	1.8	7.7	632	21.0	E.010	.19	.198	.003	.006
27...	1115	--	--	2.2	--	--	--	--	--	--	--	--	--
27...	1145	17.0	--	--	5.8	8.1	634	21.5	E.011	.17	.174	.003	.005
27...	1200	52.0	--	--	3.4	7.9	634	21.3	E.009	.19	.187	.003	.005
SEP													
26...	0859	--	1.07	--	--	--	--	--	--	--	--	--	--
26...	0900	.10	--	--	5.9	8.0	637	18.6	.022	.22	.172	.004	.007
26...	0915	68.0	--	--	5.6	8.0	637	18.8	.022	.21	.171	.004	.007
26...	0945	17.0	--	--	5.8	8.0	637	18.8	.024	.20	.171	.004	.007
26...	1000	52.0	--	--	5.8	8.0	637	18.8	.024	.21	.177	.005	.006
26...	1015	--	--	8.3	--	--	--	--	--	--	--	--	--

Date	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L) AS P (00671)	PHOS-PHORUS TOTAL (MG/L) AS P (00665)	CARBON, ORGANIC DIS-SOLVED (MG/L) AS C (00681)	PHEO-PHYTIN A, PHYTON (UG/L) (62360)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	MANGA-NESE, DIS-SOLVED (UG/L) AS MN (01056)
JUL						
22...	--	--	--	--	--	--
22...	<.007	.009	--	--	--	<2.0
22...	<.007	.012	--	--	--	E.9
22...	<.007	.011	--	--	--	3.3
22...	<.007	.013	--	--	--	E2.1
22...	--	--	--	.8	4.9	--
AUG						
27...	--	--	--	--	--	--
27...	<.007	.013	V2.5	--	--	<2.0
27...	<.007	.031	V2.5	--	--	33.3
27...	--	--	--	2.1	9.3	--
27...	<.007	.013	--	--	--	<2.0
27...	<.007	.015	--	--	--	8.1
SEP						
26...	--	--	--	--	--	--
26...	<.007	.017	V2.7	--	--	--
26...	<.007	--	V2.6	--	--	--
26...	<.007	.018	--	--	--	--
26...	<.007	.017	--	--	--	--
26...	--	--	--	2.5	2.9	--

E Estimated laboratory analysis value.

V Analyte was detected in both the environmental sample and the associated blanks.

ARKANSAS RIVER BASIN

DROUGHT SYNOPTIC SAMPLING--Continued

07099400 ARKANSAS RIVER ABOVE PUEBLO, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°16'18", long 104°43'03", in NE¹/₄NE¹/₄ sec.36, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, on left bank 200 ft downstream from northeast corner of Arkansas River bridge, 0.4 mi downstream from Pueblo Dam, and 7 mi west of Pueblo.

DRAINAGE AREA.--4,670 mi².

PERIOD OF RECORD.--October 1965 to September 1970, December 1985 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L) (00935)	SODIUM, DIS-SOLVED (MG/L) (00930)	CHLO-RIDE, DIS-SOLVED (MG/L) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L) (00950)	SILICA, DIS-SOLVED (MG/L) (00955)
JUL 22...	1505	298	10.2	8.1	606	19.0	70.7	19.6	3.00	29.7	10.2	.58	7.16
AUG 27...	1110	9.5	6.4	8.1	657	20.5	--	--	--	--	--	--	--

Date	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L) AS N (00623)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L) AS N (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) AS N (00613)	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L) AS P (00671)	PHOS-PHORUS TOTAL (MG/L) AS P (00665)	CARBON, ORGANIC DIS-SOLVED (MG/L) AS C (00681)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)
JUL 22...	158	395	.05	--	.23	.40	E.007	--	<.02	.022	2.3	e10	e5
AUG 27...	--	--	.040	.21	.28	.241	.003	.011	<.007	.022	2.5	e4	e11

Date	IRON, DIS-SOLVED (UG/L) AS FE (01046)	MANGA-NESE, DIS-SOLVED (UG/L) AS MN (01056)	SELE-NIUM, DIS-SOLVED (UG/L) AS SE (01145)	SELE-NIUM, TOTAL (UG/L) AS SE (01147)
JUL 22...	<10	49.5	4	5
AUG 27...	<10	162	4	5

e Estimated value.
E Estimated laboratory analysis value.

DROUGHT SYNOPTIC SAMPLING--Continued

07099970 ARKANSAS RIVER AT MOFFAT STREET AT PUEBLO, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°15'13", long 104°36'20", in SW¹/₄NW¹/₄ sec.6, T.21 S., R.64 W., Pueblo County, Hydrologic Unit 11020002, on right bank 10 ft upstream from Saint Charles Mesa Water District intake at Moffat Street at Pueblo (revised), 150 ft downstream from Santa Fe Avenue bridge, and 1.1 mi upstream from Fountain Creek.

DRAINAGE AREA.--4,778 mi².

PERIOD OF RECORD.--October 1988 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L) (00935)	SODIUM, DIS-SOLVED (MG/L) (00930)	CHLO-RIDE, DIS-SOLVED (MG/L) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)
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JUL 22...	1315	185	9.8	8.7	651	23.0	72.4	21.6	3.00	34.5	11.8	.6	5.99
AUG 27...	1225	4.4	8.7	8.0	1780	21.0	--	--	--	--	--	--	--

Date	SULFATE AT 180 DEG. C SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)
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JUL 22...	186	435	<.04	.24	.49	.008	<.02	.020	730	700	<10	13.2	8
AUG 27...	--	--	1.65	2.7	1.06	.333	.12	.23	1800	5500	25	141	28

Date	SELE-NIUM, TOTAL (UG/L AS SE) (01147)
JUL 22...	9
AUG 27...	32

DROUGHT SYNOPTIC SAMPLING--Continued

07106500 FOUNTAIN CREEK AT PUEBLO, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°17'16", long 104°36'02", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.19, T.20 S., R.64 W., Pueblo County, Hydrologic Unit 11020003, on left bank at upstream side of bridge on U.S. Highway 50 at Pueblo and 2.6 mi upstream from mouth.

DRAINAGE AREA.--926 mi².

PERIOD OF RECORD.--February 1981 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	1,4-DICHLORO-BENZENE DISSOLV (UG/L) (34572)	17A-ET ESTRA-DIOL, WATER, FLTRD REC (UG/L) (62052)	17B-ET ESTRA-DIOL, WATER, FLTRD REC (UG/L) (62053)	1METHYL-NAPHTHALENE, WATER, FLTRD REC (UG/L) (62054)	2,6-DIETHYL ANILINE, WAT FLT 0.7 U GF, REC (UG/L) (82660)	
JUL 24...	1015	34	7.0	8.2	1460	24.0	e870	560	<.5	<5	<5	<.5	<.006	
AUG 27...	1325	21	7.2	8.3	1500	22.5	e120	e150	<.5	<5	<5	<.5	--	
Date	Time	26DIMETHYLNAPHTHALENE, WATER, FLTRD REC (UG/L) (62055)	2METHYLNAPHTHALENE, WATER, FLTRD REC (UG/L) (62056)	3-BETACOPROSTANOL, WATER, FLTRD REC (UG/L) (62057)	3METHYL1(H)-INDOLE, WATER, FLTRD REC (UG/L) (62058)	3-TERT-BHA, WATER, FLTRD REC (UG/L) (62059)	4-CUMYLPHENOL, WATER, FLTRD REC (UG/L) (62060)	4-OCTYLPHENOL, WATER, FLTRD REC (UG/L) (62061)	4-TERT-OCTYLPHENOL, WATER, FLTRD REC (UG/L) (62062)	5METHYL1HNBENZO TRIAZOLE, WATER, FLTRD REC (UG/L) (62063)	ACETOPHENONE, WATER, FLTRD REC (UG/L) (49260)	ACETOPHENONE, WATER, FLTRD REC (UG/L) (62064)	AHTNAPHTHALENE, WATER, FLTRD REC (UG/L) (62065)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)
JUL 24...		<.5	<.5	<2	<1	<5	<1	<1	<1	<2	<.006	<.5	<.50	<.004
AUG 27...		<.5	<.5	<2	<1	<5	<1	<1	<1	<2	--	<.5	E.02	--
Date	Time	ALPHABHC DIS-SOLVED (UG/L) (34253)	ANTHRACENE DISSOLV (UG/L) (34221)	ANTHRAQUINONE, WATER, FLTRD REC (UG/L) (62066)	ATRAZINE, WATER, DISS, REC (UG/L) (39632)	BENFLURALIN, WAT FLT 0.7 U GF, REC (UG/L) (82673)	BENZO-A-PYRENE DISSOLV (UG/L) (34248)	BENZOPHENONE, WATER, FLTRD REC (UG/L) (62067)	BETA-SITOTEROL, WATER, FLTRD REC (UG/L) (62068)	BISPHE-NOL A, WATER, FLTRD REC (UG/L) (62069)	BROMO-MACIL, WATER, DISS, REC (UG/L) (04029)	BROMOFORM DISSOLV (UG/L) (34288)	BUTYLATE, WATER, DISS, REC (UG/L) (04028)	CAF-FEINE, WATER, FLTRD REC (UG/L) (50305)
JUL 24...		<.005	<.5	<.5	.013	<.010	<.5	<.5	<2	<1	<.5	<.5	<.002	<.5
AUG 27...		--	<.5	<.5	--	--	<.5	<.5	<2	<1	<.5	<.5	--	<.5
Date	Time	CAMPHOR, WATER, FLTRD REC (UG/L) (62070)	CARBARYL, WATER, FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBAZOLE, WATER, FLTRD 0.7 U REC (UG/L) (62071)	CARBOFURAN, WATER, FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOROPYRIFOS, WATER, DIS-SOLVED (UG/L) (38933)	CHOLESTEROL, WATER, FLTRD 0.7 U GF, REC (UG/L) (62072)	COTININE, WATER, FLTRD REC (UG/L) (62005)	CYANAZINE, WATER, DISS, REC (UG/L) (04041)	DCPA, WATER, FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYLATRAZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	DISULFOTON, WATER, FLTRD 0.7 U GF, REC (UG/L) (82677)
JUL 24...		<.5	<.041	<.5	<.020	<.005	<2	<1	<.018	<.003	E.006	E.005	<.005	<.02
AUG 27...		<.5	<1	<.5	--	<.5	<2	<1	--	--	--	<.5	--	--
Date	Time	D-LIMONENE, WATER, FLTRD REC (UG/L) (62073)	EPTC, WATER, FLTRD 0.7 U GF, REC (UG/L) (82668)	EQUILENIN, WATER, FLTRD 0.7 U REC (UG/L) (62074)	ESTRONE, WATER, FLT REC. (UG/L) (62484)	ETHALFLURALIN, WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHOPROP, WATER, FLTRD 0.7 U GF, REC (UG/L) (82672)	FLUORANTHENE DISSOLV (UG/L) (34377)	FONOFOS, WATER, DISS, REC (UG/L) (04095)	HHMCP-BENZOPYRAN, WATER, FLTRD REC (UG/L) (62075)	INDOLE, WATER, FLTRD REC (UG/L) (62076)	ISOBORNEOL, WATER, FLTRD REC (UG/L) (62077)	ISO-PHORONE DISSOLV (UG/L) (34409)	ISO-PROPYL BENZENE, WATER, FLTRD REC (UG/L) (62078)
JUL 24...		<.5	<.002	<5	<5	<.009	<.005	<.50	<.003	<.50	<.5	<.5	<.5	<.5
AUG 27...		<.5	--	<5	<5	--	--	E.03	--	E.01	<.5	<.5	<.5	<.5

e Estimated value.

E Estimated laboratory analysis value.

DROUGHT SYNOPTIC SAMPLING--Continued

7106500 FOUNTAIN CREEK AT PUEBLO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	ISO-QUINOLINE, WATER, FLTRD REC (UG/L) (62079)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	MENTHOL WATER, FLTRD REC (UG/L) (62080)	METAL-AXYL WATER FLTRD REC (UG/L) (50359)	METHYL-AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL-PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METHYL-SALICY-LATE, WATER, FLTRD REC (UG/L) (62081)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	DEET, WATER, FLTRD REC (UG/L) (62082)
JUL 24...	<.5	<.004	<.035	<.027	<.5	<.5	<.050	<.006	<.5	<.013	<.006	<.002	E.01
AUG 27...	<.5	--	--	--	<.5	<.5	--	--	<.5	<.5	--	--	<.50
Date	NAPHTH-ALENE DISSOLV (UG/L) (34443)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	NONYL-PHENOL, DIETHOX WATER, FLTRD REC (UG/L) (62083)	DI-ETHOXY-OCTYL-PHENOL WAT FLT REC (UG/L) (61705)	MONO-ETHOXY-OCTYL-PHENOL WAT FLT REC (UG/L) (61706)	P,P'-DDE DISSOLV (UG/L) (34653)	PARA-CRESOL, WATER, FLTRD REC (UG/L) (62084)	PARA-NONYL-PHENOL, WATER, FLTRD REC (UG/L) (62085)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PENTA-CHLORO-PHENOL DISSOLV (UG/L) (34459)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)
JUL 24...	<.5	<.007	<5	<1	<1	<.003	<1	<5	<.010	<.004	<.022	<2	<.006
AUG 27...	<.5	--	<5	<1	<1	--	<1	<5	--	--	--	<2	--
Date	PHENAN-THREN EDISSLV (UG/L) (34462)	PHENOL WATER FILTRD (UG/L) (34466)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER, FLTRD REC (UG/L) (82679)	PRO-PARGITE WATER, FLTRD REC (UG/L) (82685)	PYRENE DISSOLV (UG/L) (34470)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	STIGMA-STANOL, WATER, FLTRD REC (UG/L) (62086)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
JUL 24...	<.50	E.3	<.011	.03	<.004	<.010	<.011	<.02	<.50	<.005	<2	<.02	<.034
AUG 27...	E.02	<.5	--	<.5	--	--	--	--	E.01	--	<2	--	--
Date	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TETRA-CHLORO-ETHY-LENE DISSOLV (UG/L) (34476)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	FYROL CEF, WATER, FLTRD REC (UG/L) (62087)	FYROL PCF, WATER, FLTRD REC (UG/L) (62088)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRIBUTL-PHOS-PHATE, WATER, FLTRD REC (UG/L) (62089)	TRICLO-SAN, WATER, FLTRD REC (UG/L) (62090)	TRI-ETHYL CITRATE WATER, FLTRD REC (UG/L) (62091)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	TRIPHNL-PHOS-PHATE, WATER, FLTRD REC (UG/L) (62092)	TRIS(2-BUTOXE- PHOS-PHATE, WATER, FLTRD REC (UG/L) (62093)	DICHLOR-VOS, WATER, FLTRD REC (UG/L) (38775)
JUL 24...	<.02	<.5	<.005	E.06	E.07	<.002	<.5	<1	<.5	<.009	<.50	E.1	<1.00
AUG 27...	--	<.5	--	<.50	E.04	--	<.5	<1	<.5	--	E.01	<.5	<1.00

e Estimated value.
E Estimated laboratory analysis value.

DROUGHT SYNOPTIC SAMPLING--Continued

07109500 ARKANSAS RIVER NEAR AVONDALE, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°14'53", long 104°23'55", in NE¹/₄SW¹/₄ sec.1, T.21 S., R.63 W., Pueblo County, Hydrologic Unit 11020002, on right bank 15 ft downstream from bridge on Sixmile Road, 0.3 mi upstream from Sixmile Creek, and 2.6 mi west of Avondale.

DRAINAGE AREA.--6,327 mi².

PERIOD OF RECORD.--April to September 1976, April 1979 to September 1980, December 1985 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	
JUL 24...	1130	276	7.5	8.1	912	25.0	80.5	31.9	4.31	58.9	24.3	.8	8.09	
AUG 27...	1430	103	8.4	8.2	1220	24.5	--	--	--	--	--	--	--	
Date	Time	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L AS N) (70300)	NITROGEN, AMMONIA + ORGANIC (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC (MG/L AS N) (00625)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	ORTHOPHOSPHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	E COLI, MTEC MF (COL/100 ML) (31633)	COLIFORMS, FECAL, UM-MF (COLS./100 ML) (31625)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)
JUL 24...	293	639	<.04	.71	1.48	.024	.10	.33	270	380	<10	7.4	11	
AUG 27...	--	--	.07	.79	2.77	.095	.19	.31	e160	270	<10	71.1	15	
Date	Time	SELENIUM, TOTAL (UG/L AS SE) (01147)	1,4-DICHLOROBENZENE DISSOLV (UG/L) (34572)	17A-ETRA-DIOL, WATER, REC (UG/L) (62052)	17B-ETRA-DIOL, WATER, REC (UG/L) (62053)	1METHYLNAPHTHALENE, WATER, REC (UG/L) (62054)	2,6-DIETHYLANILINE, WAT FLT 0.7 U GF, REC (UG/L) (82660)	26DIMETHYLNAPHTHALENE, WATER, REC (UG/L) (62055)	2METHYLNAPHTHALENE, WATER, REC (UG/L) (62056)	3-BETACOPROSTANOL, WATER, REC (UG/L) (62057)	3METHYLNAPHTHALENE, WATER, REC (UG/L) (62058)	3-TERTBHA, WATER, REC (UG/L) (62059)	4-CUMYLPHENOL, WATER, REC (UG/L) (62060)	4-OCTYLPHENOL, WATER, REC (UG/L) (62061)
JUL 24...	10	<.5	<5	<5	<.50	<.006	<.50	<.5	<2	<1	<5	<1	<1	
AUG 27...	18	E.2	<5	<5	E.04	--	E.03	E.1	E2	<1	<5	<1	<1	
Date	Time	4-TERTOCTYLBENZOPHENOL, WATER, REC (UG/L) (62062)	5METHYLBENZOTRIAZOLE, WATER, REC (UG/L) (62063)	ACETOCHLOR, WATER, REC (UG/L) (49260)	ACETOCHLOR, WATER, REC (UG/L) (62064)	AHTNAPHTHALENE, WATER, REC (UG/L) (62065)	ALACHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHABHC, DIS-SOLVED (UG/L) (34253)	ANTHRACENE, DISSOLV (UG/L) (34221)	ANTHRACENE, WATER, REC (UG/L) (62066)	3-BETACOPROSTANOL, WATER, REC (UG/L) (62066)	ATRAZINE, WATER, DISS, REC (UG/L) (39632)	BENFLURALIN, WAT FLD 0.7 U GF, REC (UG/L) (82673)	BENZOPHENONE, WATER, REC (UG/L) (62067)
JUL 24...	<1	<2	<.006	<.5	E.1	<.004	<.005	<.5	<.5	E.006	<.010	<.5	<.50	
AUG 27...	<1	<2	--	1.2	E.2	--	--	<.5	<.5	--	--	<.5	E.04	
Date	Time	BETASITOTEROL, WATER, REC (UG/L) (62068)	BISPHE-NOL A, WATER, REC (UG/L) (62069)	BROMOFORM, DISS, REC (UG/L) (04029)	BUTYLATE, WATER, DISS, REC (UG/L) (34288)	CAMPHOR, WATER, REC (UG/L) (04028)	CAF-EINE, WATER, REC (UG/L) (50305)	CAMPHOR, WATER, REC (UG/L) (62070)	CAMPHOR, WATER, REC (UG/L) (82680)	CARBACARBON, WATER, REC (UG/L) (62071)	CARBONFURAN, WATER, REC (UG/L) (82674)	CHLORPYRIFOS, DIS-SOLVED (UG/L) (38933)	CHOLESTEROL, WATER, REC (UG/L) (62072)	COTONINE, WATER, REC (UG/L) (62005)
JUL 24...	<2	<1	<.5	<.5	<.002	E.5	<.5	<.041	<.5	<.020	<.005	<2	<1	
AUG 27...	E2	<1	<.5	<.5	--	<.5	<.5	<1	<.5	--	<.5	3	<1	

e Estimated value.

E Estimated laboratory analysis value.

DROUGHT SYNOPTIC SAMPLING--Continued

07109500 ARKANSAS RIVER NEAR AVONDALE, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER, FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER, FLTRD 0.7 U GF, REC (UG/L) (82677)	D-LIMO-NENE, WATER, FLTRD 0.7 U GF, REC (UG/L) (62073)	EPTC WATER, FLTRD 0.7 U GF, REC (UG/L) (82668)	EQUILE-NIN, WATER, FLTRD 0.7 U GF, REC (UG/L) (62074)	ESTRONE WATER, FLT REC. (UG/L) (62484)	ETHAL-FLUR-ALIN, WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER, FLTRD 0.7 U GF, REC (UG/L) (82672)	FLUOR-ANTHENE DISSOLV (UG/L) (34377)
JUL 24...	<.018	<.003	<.006	E.003	<.005	<.02	<.5	<.002	<5	<5	<.009	<.005	<.5
AUG 27...	--	--	--	<.5	--	--	E1.0	--	<5	<5	--	--	<.5
Date	FONOFOFOS WATER, DISS REC (UG/L) (04095)	HHMCP-BENZO-PYRAN, WATER, FLTRD REC (UG/L) (62075)	INDOLE, WATER, FLTRD REC (UG/L) (62076)	ISOBOR-NEOL, WATER, FLTRD REC (UG/L) (62077)	ISO-PHORONE DISSOLV (UG/L) (34409)	ISO-PROPYL BENZENE, WATER, FLTRD REC (UG/L) (62078)	ISO-QUIN-OLINE, WATER, FLTRD REC (UG/L) (62079)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER, FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, WATER, FLTRD REC (UG/L) (39532)	MENTHOL WATER, FLTRD REC (UG/L) (62080)	METAL-AXYL WATER, FLTRD REC (UG/L) (50359)	METHYL-AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)
JUL 24...	<.003	<.50	<.5	<.5	<.5	<.5	<.5	<.004	<.035	<.027	<.5	<.5	<.050
AUG 27...	--	E.03	<.5	<.5	<.5	E.5	<.5	--	--	--	<.5	<.5	--
Date	METHYL-PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METHYL-SALICY-LATE, WATER, FLTRD REC (UG/L) (62081)	METO-LACHLOR WATER, DISSOLV (UG/L) (39415)	METRI-BUZIN WATER, DISSOLV (UG/L) (82630)	MOL-INATE WATER, FLTRD 0.7 U GF, REC (UG/L) (82671)	DEET, WATER, FLTRD REC (UG/L) (62082)	NAPHTH-ALENE DISSOLV (UG/L) (34443)	NAPROP-AMIDE WATER, FLTRD 0.7 U GF, REC (UG/L) (82684)	NONYL-PHENOL, DIETHOX WATER, FLTRD 0.7 U REC (UG/L) (62083)	DI-ETHOXY-OCTYL-PHENOL WAT FLT REC (UG/L) (61705)	MONO-ETHOXY-OCTYL-PHENOL WAT FLT REC (UG/L) (61706)	P,P' DDE DISSOLV (UG/L) (34653)	PARA-CRESOL, WATER, FLTRD REC (UG/L) (62084)
JUL 24...	<.006	<.5	E.011	<.006	<.002	E.1	<.5	<.007	<5	<1	<1	<.003	<1
AUG 27...	--	E.1	<.5	--	--	E.2	E.4	--	E3	<1	<1	--	<1
Date	PARA-NONYL-PHENOL, WATER, FLTRD REC (UG/L) (62085)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER, FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PENTA-CHLORO-PHENOL DISSOLV (UG/L) (34459)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHENAN-THREN V (UG/L) (34462)	PHENOL WAT FLT 0.7 U GF, REC (UG/L) (34466)	PHORATE WATER, FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS (UG/L) (04037)	PRON-AMIDE WATER, FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER, FLTRD 0.7 U GF, REC (UG/L) (82679)
JUL 24...	<5	<.010	<.004	<.022	<2	<.006	<.5	<.5	<.011	.02	<.004	<.010	<.011
AUG 27...	E5	--	--	--	<2	--	E.1	<.5	--	<.5	--	--	--
Date	PRO-PARGITE WATER, FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (34470)	STIGMA-STANOL, WATER, FLTRD REC (UG/L) (04035)	TEBU-THIUON WATER, FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER, FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUPOS WATER, FLTRD 0.7 U GF, REC (UG/L) (82675)	TETRA-CHLORO-ETHY-LENE DISSOLV (UG/L) (34476)	THIO-BENCARB WATER, FLTRD 0.7 U GF, REC (UG/L) (82681)	FYROL CEF, WATER, FLTRD REC (UG/L) (62087)	FYROL PCF, WATER, FLTRD REC (UG/L) (62088)	TRIAL-LATE WATER, FLTRD 0.7 U GF, REC (UG/L) (82678)	TRIBUTL-PHOS-PHATE, WATER, FLTRD REC (UG/L) (62089)	
JUL 24...	<.02	<.5	.014	<2	<.02	<.034	<.02	<.5	<.005	E.05	E.05	<.002	<.5
AUG 27...	--	<.5	--	<2	--	--	--	E.2	--	E.06	E.07	--	E.1
Date	TRICLO-SAN, WATER, REC (UG/L) (62090)	TRI-ETHYL CITRATE WATER, REC (UG/L) (62091)	TRI-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	TRIPHNL PHATE, WATER, REC (UG/L) (62092)	TRIS(2-BUTOXE-PHOS-PHATE, WATER, FLTRD REC (UG/L) (62093)	DICHLOR VOS, WATER, FLTRD REC (UG/L) (38775)							
JUL 24...	<1	<.5	<.009	<.5	E.5	<1.00							
AUG 27...	E.1	<.5	--	<.5	1.0	<1.00							

E Estimated laboratory analysis value.

DROUGHT SYNOPTIC SAMPLING--Continued

07119700 ARKANSAS RIVER AT CATLIN DAM NEAR FOWLER, CO

WATER-QUALITY RECORDS

LOCATION (REVISED).--Lat 38°07'33", long 103°54'41", in NE¹/₄NE¹/₄ sec.20, T.22 S., R.58 W., Otero County, Hydrologic Unit 11020005, on right bank at Catlin Canal flume gage, 2.2 mi downstream from diversion dam for Catlin Canal, 2.3 mi downstream from Apishapa River, and 6.0 mi east of Fowler.

DRAINAGE AREA.--10,901 mi², of which 54 mi² is probably noncontributing.

PERIOD OF RECORD.--May 1990 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNESIUM, DIS-SOLVED (MG/L) (00925)	POTASSIUM, DIS-SOLVED (MG/L) (00935)	SODIUM, DIS-SOLVED (MG/L) (00930)	CHLORIDE, DIS-SOLVED (MG/L) (00940)	FLUORIDE, DIS-SOLVED (MG/L) (00950)	SILICA, DIS-SOLVED (MG/L) (00955)
JUL 23...	1100	23	8.4	8.4	1080	24.5	108	38.7	4.04	73.2	25.1	1.0	8.28
AUG 28...	1415	5.7	8.9	8.2	1900	31.5	--	--	--	--	--	--	--

Date	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITROGEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L) AS N (00625)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITROGEN, NITRITE DIS-SOLVED (MG/L) AS N (00613)	ORTHOPHOSPHATE, DIS-SOLVED (MG/L) AS P (00671)	PHOSPHORUS TOTAL (MG/L) AS P (00665)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	COLIFORM, FECAL, UM-MF (COLS./100 ML) (31625)	IRON, DIS-SOLVED (UG/L) AS FE (01046)	MANGANESE, DIS-SOLVED (UG/L) AS MN (01056)	SELENIUM, DIS-SOLVED (UG/L) AS SE (01145)
JUL 23...	369	775	<.04	.44	1.20	.009	.03	.153	e240	210	<10	12.8	9
AUG 28...	--	--	<.04	.38	2.11	.036	<.02	.037	e86	280	<10	24.2	13

Date	SELENIUM, TOTAL (UG/L) AS SE (01147)
JUL 23...	10
AUG 28...	14

e Estimated value.

DROUGHT SYNOPTIC SAMPLING--Continued

07120480 LAKE MEREDITH OUTLET AT HIGHWAY 71 NEAR ORDWAY, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°08'53", long 103°44'49", in NW¹/₄SW¹/₄ sec.12, T.22 S., R.57 W., Crowley County, Hydrologic Unit 11020005, on right wingwall 5 ft upstream from Lake Meredith outlet gate, 200 ft upstream from State Highway 71, 0.7 mi downstream from Lake Meredith, and 4.6 mi south of Ordway.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--November 2001 to September 2002.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNESIUM, DIS-SOLVED (MG/L) (00925)	POTASSIUM, DIS-SOLVED (MG/L) (00935)	SODIUM, DIS-SOLVED (MG/L) (00930)	CHLORIDE, DIS-SOLVED (MG/L) (00940)	FLUORIDE, DIS-SOLVED (MG/L) (00950)	SILICA, DIS-SOLVED (MG/L) (00955)
JUL 23...	1330	20	6.1	8.4	2670	24.0	204	92.3	8.59	299	137	2.21	2.42
AUG 28...	1040	8.0	6.4	8.3	4280	20.0	--	--	--	--	--	--	--

Date	Time	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITROGEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L) AS N (00625)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITROGEN, NITRITE DIS-SOLVED (MG/L) AS N (00613)	ORTHOPHOSPHATE, DIS-SOLVED (MG/L) AS P (00671)	PHOSPHORUS TOTAL (MG/L) AS P (00665)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	IRON, DIS-SOLVED (UG/L) AS FE (01046)	MANGANESE, DIS-SOLVED (UG/L) AS MN (01056)	SELENIUM, DIS-SOLVED (UG/L) AS SE (01145)
JUL 23...	1230	2160	<.04	3.6	<.05	<.008	<.02	.53	e140	e73	<30	365	5	
AUG 28...	--	--	.10	8.4	<.05	<.008	<.02	.75	e880	e840	<30	271	5	

Date

SELENIUM, TOTAL (UG/L) AS SE (01147)

JUL 23... 5

AUG 28... 3

e Estimated value.

DROUGHT SYNOPTIC SAMPLING--Continued

07123000 ARKANSAS RIVER AT LA JUNTA, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 37°59'26", long 103°31'55", in SE¹/₄NE¹/₄ sec.2, T.24 S., R.55 W., Otero County, Hydrologic Unit 11020005, on right bank at upstream side of bridge on State Highway 109 at La Junta, 450 feet upstream from King Arroyo.

DRAINAGE AREA.--12,210 mi², of which 115 mi² is probably noncontributing.

PERIOD OF RECORD.--July 1998 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNESIUM, DIS-SOLVED (MG/L) (00925)	POTASSIUM, DIS-SOLVED (MG/L) (00935)	SODIUM, DIS-SOLVED (MG/L) (00930)	CHLORIDE, DIS-SOLVED (MG/L) (00940)	FLUORIDE, DIS-SOLVED (MG/L) (00950)	SILICA, DIS-SOLVED (MG/L) (00955)
JUL 23...	1245	28	8.2	8.2	2310	29.5	250	82.8	4.99	174	52.5	1.2	13.0
SEP 04...	1515	12	7.3	8.2	2460	32.0	--	--	--	--	--	--	--

Date	SULFATE AT 180 DEG. C DIS-SOLVED (MG/L) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITROGEN, AMMONIA + DIS-SOLVED (MG/L) (00608)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L) (00625)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)	NITROGEN, NITRITE DIS-SOLVED (MG/L) (00613)	ORTHOPHOSPHATE, DIS-SOLVED (MG/L) (00671)	PHOSPHORUS TOTAL (MG/L) (00665)	E COLI, MTEC MF (COL/100 ML) (31633)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	IRON, DIS-SOLVED (UG/L) (01046)	MANGANESE, DIS-SOLVED (UG/L) (01056)	SELENIUM, DIS-SOLVED (UG/L) (01145)
JUL 23...	1080	1990	.04	.85	2.60	E.007	<.02	.119	200	120	<30	8.1	13
SEP 04...	--	--	E.04	.81	3.11	.027	<.02	.103	68	e150	<30	15.4	9

Date
 SELENIUM, TOTAL (UG/L) (01147)
 JUL 23... 13
 SEP 04... 11

e Estimated value.
 E Estimated laboratory analysis value.

DROUGHT SYNOPTIC SAMPLING--Continued

07124000 ARKANSAS RIVER AT LAS ANIMAS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°04'51", long 103°13'09", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.3, T.23 S., R.52 W., Bent County, Hydrologic Unit 11020009, on right bank at upstream side of bridge on U.S. Highway 50, 1.1 mi north of courthouse in Las Animas, and 4.2 mi upstream from Purgatoire River.

DRAINAGE AREA.--14,417 mi², of which 441 mi² are probably noncontributing.

PERIOD OF RECORD.--December 1985 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPE-CIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNESIUM, DIS-SOLVED (MG/L) (00925)	POTASSIUM, DIS-SOLVED (MG/L) (00935)	SODIUM, DIS-SOLVED (MG/L) (00930)	CHLORIDE, DIS-SOLVED (MG/L) (00940)	FLUORIDE, DIS-SOLVED (MG/L) (00950)	SILICA, DIS-SOLVED (MG/L) AS (00955)	
JUL 23...	1115	10	8.4	8.1	3320	26.5	325	125	4.76	344	89.9	1.2	17.9	
SEP 04...	1045	13	9.0	8.1	3300	22.5	--	--	--	--	--	--	--	
Date	Time	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) AS SO4 (00945)	NITROGEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L) AS N (00625)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITROGEN, NITRITE DIS-SOLVED (MG/L) AS N (00613)	ORTHO-PHOSPHATE, DIS-SOLVED (MG/L) AS P (00671)	PHOSPHORUS TOTAL (MG/L) AS P (00665)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	COLIFORM, FECAL, UM-MF (COLS./100 ML) (31625)	IRON, DIS-SOLVED (UG/L) AS FE (01046)	MANGANESE, DIS-SOLVED (UG/L) AS MN (01056)	SELENIUM, DIS-SOLVED (UG/L) AS SE (01145)	
JUL 23...	1590	2970	.05	.39	1.37	.017	<.02	.034	140	e120	<30	43.1	12	
SEP 04...	--	--	E.04	.39	1.11	.019	<.02	.029	140	290	<30	133	E10	
Date	Time	SELENIUM, TOTAL (UG/L) AS SE (01147)	1,4-DICHLORO-BENZENE DISSOLV (UG/L) (34572)	1METHYL-NAPHTHALENE FLTRD REC (UG/L) (62054)	2,6-DIETHYL ANILINE WAT FLT (UG/L) (82660)	26DIMETHYL-NAPHTHALENE FLTRD REC (UG/L) (62055)	2METHYL-NAPHTHALENE FLTRD REC (UG/L) (62056)	3-BETA-COPROSTANOL, WATER, FLTRD REC (UG/L) (62057)	3METHYL-1(H)-INDOLE, WATER, FLTRD REC (UG/L) (62058)	3-TERT-BHA, WATER, FLTRD REC (UG/L) (62059)	4-CUMYL PHENOL, WATER, FLTRD REC (UG/L) (62060)	4-OCTYL PHENOL, WATER, FLTRD REC (UG/L) (62061)	4-TERT-OCTYL PHENOL, WATER, FLTRD REC (UG/L) (62062)	5METHYL-1H-BENZO TRIAZOLE, WATER, FLTRD REC (UG/L) (62063)
JUL 23...	11	<.5	<.5	<.006	<.5	<.5	<2	<1	<5	<1	<1	<1	<1	<2
SEP 04...	7	--	--	--	--	--	--	--	--	--	--	--	--	--
Date	Time	ACETO-CHLOR, WATER, FLTRD REC (UG/L) (49260)	ACETO-PHENONE, WATER, FLTRD REC (UG/L) (62064)	AHT-NAPHTHALENE, WATER, FLTRD REC (UG/L) (62065)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA-BHC, DIS-SOLVED (UG/L) (34253)	ANTHRA-CENE, DISSOLV REC (UG/L) (34221)	ANTHRA-QUINONE, WATER, FLTRD REC (UG/L) (62066)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	FLUR-ALIN, WAT FLD 0.7 U (UG/L) (82673)	BENZO-A-PYRENE, DISSOLV REC (UG/L) (34248)	BENZO-PHENONE, WATER, FLTRD REC (UG/L) (62067)	BETA-SITOS-TEROL, WATER, FLTRD REC (UG/L) (62068)	BISPHENOL A, WATER, FLTRD REC (UG/L) (62069)
JUL 23...	<.006	<.5	<.5	<.004	<.005	<.5	<.5	.010	<.010	<.5	<.5	<2	<1	
SEP 04...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Date	Time	BRO-MACIL, WATER, DISS, REC (UG/L) (04029)	BROMO-FORM, DISSOLV (UG/L) (34288)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAF-FINE, WATER, FLTRD REC (UG/L) (50305)	CAMPHOR, WATER, FLTRD REC (UG/L) (62070)	CAR-BARYL, WATER, FLTRD 0.7 U (UG/L) (82680)	CARBA-ZOLE, WATER, FLTRD REC (UG/L) (62071)	CARBO-FURAN, WATER, FLTRD 0.7 U (UG/L) (82674)	CHLOR-PYRIFOS, DIS-SOLVED (UG/L) (38933)	CHOLESTEROL, WATER, REC (UG/L) (62072)	COT-ININE, WATER, FLTRD REC (UG/L) (62005)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA, WATER, FLTRD 0.7 U (UG/L) (82682)
JUL 23...	<.5	<.5	<.002	<.5	<.5	<.041	<.5	<.020	<.005	E.5	<1	<.018	<.003	
SEP 04...	--	--	--	--	--	--	--	--	--	--	--	--	--	--

e Estimated value.

E Estimated laboratory analysis value.

DROUGHT SYNOPTIC SAMPLING--Continued

07124000 ARKANSAS RIVER AT LAS ANIMAS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	DEETHYL- ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN, DIS- SOLVED (UG/L) (39381)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	D-LIMO- NENE, WATER, FLTRD 0.7 U GF, REC (UG/L) (62073)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FLUOR- ANTHENE WATER DISS DISSOLV (UG/L) (34377)	FONOFOS WATER DISS REC (UG/L) (04095)	HHHMCP- BENZO- PYRAN, WATER, FLTRD REC (UG/L) (62075)	INDOLE, WATER, FLTRD REC (UG/L) (62076)	ISOBOR- NEOL, WATER, FLTRD REC (UG/L) (62077)
JUL 23... SEP 04...	E.015	<.005	<.005	<.02	<.5	<.002	<.009	<.005	<.5	<.003	<.5	<.5	<.5
Date	ISO- PHORONE DISSOLV (UG/L) (34409)	ISO- PROPYL BENZENE WATER, FLTRD REC (UG/L) (62078)	ISO- QUIN- OLINE, WATER, FLTRD REC (UG/L) (62079)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	MENTHOL WATER, FLTRD REC (UG/L) (62080)	METAL- AXYL WATER FLTRD REC (UG/L) (50359)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METHYL SALICY- LATE, WATER, FLTRD REC (UG/L) (62081)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)
JUL 23... SEP 04...	<.5	<.5	<.5	<.004	<.035	<.027	<.5	<.5	<.050	<.006	<.5	<.013	<.006
Date	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	DEET, WATER, FLTRD REC (UG/L) (62082)	NAPHTH- ALENE DISSOLV (UG/L) (34443)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	NONYL- PHENOL, DIETHOX WATER, FLTRD 0.7 U GF, REC (UG/L) (62083)	DI- ETHOXY- OCTYL- PHENOL WAT FLT REC (UG/L) (61705)	MONO- ETHOXY- OCTYL- PHENOL WAT FLT REC (UG/L) (61706)	P,P' DDE DISSOLV (UG/L) (34653)	PARA- CRESOL, WATER, FLTRD REC (UG/L) (62084)	PARA- NONYL- PHENOL, WATER, FLTRD REC (UG/L) (62085)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
JUL 23... SEP 04...	<.002	<.5	<.5	<.007	<5	<1	<1	<.003	<1	<5	<.010	<.004	<.022
Date	PENTA- CHLORO- PHENOL DISSOLV (UG/L) (34459)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHENAN - THREN EDISSOL V(UG/L) (34462)	PHENOL WATER FILTRD (UG/L) (34466)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	PYRENE DISSOLV (UG/L) (34470)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	STIGMA- STANOL, WATER, FLTRD REC (UG/L) (62086)
JUL 23... SEP 04...	<2	<.006	<.5	<.5	<.011	<.01	<.004	<.010	<.011	<.02	<.5	<.005	<2
Date	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TETRA- CHLORO- ETHY- LENE DISSOLV (UG/L) (34476)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	FYROL CEF, WATER, FLTRD REC (UG/L) (62087)	FYROL PCF, WATER, FLTRD REC (UG/L) (62088)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRIBUTL PHOS- PHATE, WATER, FLTRD REC (UG/L) (62089)	TRICLO- SAN, WATER, FLTRD REC (UG/L) (62090)	TRI- ETHYL CITRATE WATER, FLTRD REC (UG/L) (62091)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	TRIPHNL PHOS- PHATE, WATER, FLTRD REC (UG/L) (62092)
JUL 23... SEP 04...	<.02	<.034	<.02	<.5	<.005	<.5	<.5	<.002	<.5	<1	<.5	<.009	<.5
Date						TRIS(2- BUTOXE- PHOS- PHATE, WATER, FLTRD (UG/L) (62093)	DICHLOR VOS, WATER FLTRD REC (UG/L) (38775)						
JUL 23... SEP 04...						<.5	<1.00						

E Estimated laboratory analysis value.

DROUGHT SYNOPTIC SAMPLING--Continued

07124200 PURGATOIRE RIVER AT MADRID, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 37°07'46", long 104°38'22", in SW¹/₄NE¹/₄ sec.35, T.33 S., R.65 W., Las Animas County, Hydrologic Unit 11020010, on left bank 70 ft downstream from county road bridge, 0.3 mi northeast of Madrid, 1.0 mi downstream from Burro Canyon, and 9 mi west of Trinidad.

DRAINAGE AREA.--505 mi².

PERIOD OF RECORD.--June 1978 to September 1981, August 2002.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPE-CIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNESIUM, DIS-SOLVED (MG/L) (00925)	POTASSIUM, DIS-SOLVED (MG/L) (00935)	SODIUM, DIS-SOLVED (MG/L) (00930)	CHLORIDE, DIS-SOLVED (MG/L) (00940)	FLUORIDE, DIS-SOLVED (MG/L) (00950)	SILICA, DIS-SOLVED (MG/L) (00955)	
AUG	28...	1400	E1.9	6.9	8.7	1070	23.5	29.4	17.4	3.25	174	110	.7	3.18
Date	Time	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (00945)	NITROGEN, AMMONIA DIS-SOLVED (MG/L) (00608)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L) (00623)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L) (00625)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)	NITROGEN, NITRITE DIS-SOLVED (MG/L) (00613)	PHOSPHORUS, DIS-SOLVED (MG/L) (00666)	ORTHOPHOSPHATE, DIS-SOLVED (MG/L) (00671)	PHOSPHORUS, DIS-SOLVED TOTAL (MG/L) (00665)	CARBON, ORGANIC TOTAL (MG/L) (00680)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	COLIFORM, FECAL, UM-MF (COLS./100 ML) (31625)	
AUG	28...	76.2	555	<.015	.24	.31	<.013	<.002	.012	E.006	.035	3.8	75	77
Date	Time	IRON, DIS-SOLVED (UG/L) (01046)	MANGANESE, DIS-SOLVED (UG/L) (01056)	SELENIUM, DIS-SOLVED (UG/L) (01145)	SELENIUM, DIS-SOLVED TOTAL (UG/L) (01147)									
AUG	28...	<10	8.2	<2	<2									

E Estimated laboratory analysis value.

DROUGHT SYNOPTIC SAMPLING--Continued

TRINIDAD LAKE NEAR TRINIDAD, CO

WATER-QUALITY RECORDS

370831104331101 TRINIDAD LAKE SITE T1

LOCATION.--Lat 37°08'31", long 104°33'11", in NE¹/₄SW¹/₄, sec.27, T.33 S., R.64 W., Las Animas County, Hydrologic Unit 11020010, at approximate center of transect approximately 0.1 mi upstream from Trinidad Dam on Purgatoire River, 0.2 mi downstream from Carpios Canyon, and 3.3 mi southwest of Trinidad County Courthouse.

PERIOD OF RECORD.--August 2002.

REMARKS.--Chlorophyll samples were composited from samples collected at the surface, at the transparency depth (secchi disk), and at twice the transparency depth.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SAM-PLING DEPTH (FEET) (00003)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD) UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L) AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L) AS N) (00623)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L) AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) AS N) (00613)	
AUG													
28...	1028	--	.91	--	--	--	--	--	--	--	--	--	
28...	1031	.10	--	6.4	8.3	637	20.0	<.015	.21	.29	<.013	<.002	
28...	1033	3.00	--	6.3	8.3	637	19.9	<.015	.20	.30	<.013	<.002	
28...	1034	6.00	--	6.3	8.3	637	19.8	<.015	.22	.30	<.013	<.002	
28...	1035	9.00	--	6.3	8.3	637	19.8	--	--	--	--	--	
28...	1036	12.0	--	6.3	8.3	637	19.8	--	--	--	--	--	
28...	1037	15.0	--	6.3	8.3	637	19.8	--	--	--	--	--	
28...	1038	18.0	--	6.2	8.3	637	19.8	--	--	--	--	--	
28...	1039	21.0	--	6.2	8.3	637	19.8	--	--	--	--	--	
28...	1040	24.0	--	6.2	8.3	637	19.8	--	--	--	--	--	
28...	1041	27.0	--	6.2	8.3	637	19.8	--	--	--	--	--	
28...	1042	30.0	--	6.2	8.3	637	19.8	--	--	--	--	--	
28...	1043	33.0	--	6.2	8.3	637	19.8	--	--	--	--	--	
28...	1044	36.0	--	6.2	8.3	637	19.8	--	--	--	--	--	
28...	1046	39.0	--	6.0	8.3	637	19.6	--	--	--	--	--	
28...	1047	42.0	--	6.0	8.3	637	19.6	--	--	--	--	--	
28...	1048	45.0	--	6.0	8.3	637	19.6	--	--	--	--	--	
28...	1049	48.0	--	6.0	8.3	637	19.5	--	--	--	--	--	
28...	1050	49.0	--	5.9	8.3	637	19.5	--	--	--	--	--	
AUG													
28...	1030	.10	--	6.4	8.3	637	20.0	<.015	.21	.29	<.013	<.002	
28...	1100	48.0	--	6.0	8.3	637	19.5	<.015	.20	.30	<.013	<.002	
28...	1115	42.0	--	6.0	8.3	637	19.6	<.015	.22	.30	<.013	<.002	
28...	1145	--	.91	--	--	--	--	--	--	--	--	--	
Date	Time	SAM-PLING DEPTH (FEET) (00003)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD) UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L) AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L) AS N) (00623)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L) AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) AS N) (00613)
AUG													
28...		.009	<.007	.030	3.5	--	--	<2.0					
28...		.009	<.007	.030	3.6	--	--	<2.0					
28...		.008	<.007	.029	3.2	--	--	<2.0					
28...		--	--	--	--	7.7	5.5	--					

DROUGHT SYNOPTIC SAMPLING--Continued

07126500 PURGATOIRE RIVER AT NINEMILE DAM NEAR HIGBEE, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 37°42'53", long 103°30'38", in NW¹/₄NW¹/₄ sec.7, T.27 S., R.54 W., Otero County, Hydrologic Unit 11020010, on left bank at Ninemile Dam, 4 mi southwest of Higbee, and 5.5 mi upstream from Smith Canyon.

DRAINAGE AREA.--2,752 mi².

PERIOD OF RECORD.--September 2002.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L) (00935)	SODIUM, DIS-SOLVED (MG/L) (00930)	CHLO-RIDE, DIS-SOLVED (MG/L) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L) (00950)	SILICA, DIS-SOLVED (MG/L) AS SIO2 (00955)
SEP 04...	1225	.21	5.8	8.0	409	22.5	51.9	9.93	4.46	12.8	2.89	.2	7.97
Date	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L) AS N (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L) AS N (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) AS N (00613)	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L) AS P (00671)	PHOS-PHORUS TOTAL (MG/L) AS P (00665)	CARBON, ORGANIC DIS-SOLVED (MG/L) AS C (00681)	CARBON, ORGANIC TOTAL (MG/L) AS C (00680)	E COLI, MTEC MF WATER (COL/100 ML) (31633)
SEP 04...	105	261	.171	.55	.95	.528	.054	.030	.017	.172	6.4	8.6	e200
Date	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	IRON, DIS-SOLVED (UG/L) AS FE (01046)	MANGA-NESE, DIS-SOLVED (UG/L) AS MN (01056)	SELE-NIUM, DIS-SOLVED (UG/L) AS SE (01145)	SELE-NIUM, TOTAL (UG/L) AS SE (01147)								
SEP 04...	110	<10	66.2	E1	<2								

e Estimated value.

E Estimated laboratory analysis value.

DROUGHT SYNOPTIC SAMPLING--Continued

07133000 ARKANSAS RIVER AT LAMAR, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°06'21", long 102°37'05", in NE¹/₄SE¹/₄ sec.30, T.22 S., R.46 W., Prowers County, Hydrologic Unit 11020009, on left bank at left downstream end of downstream bridge on U.S. Highways 50 and 287 (revised), and 1.3 mi north of courthouse in Lamar.

DRAINAGE AREA.--19,780 mi², of which 950 mi² is probably noncontributing.

PERIOD OF RECORD.--November 1963 to September 1965, September 1969 to August 1972, September 2002.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPE-CIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNESIUM, DIS-SOLVED (MG/L) (00925)	POTASSIUM, DIS-SOLVED (MG/L) (00935)	SODIUM, DIS-SOLVED (MG/L) (00930)	CHLORIDE, DIS-SOLVED (MG/L) (00940)	FLUORIDE, DIS-SOLVED (MG/L) (00950)	SILICA, DIS-SOLVED (MG/L) (00955)
SEP 04...	0915	5.8	7.8	8.0	3680	19.0	320	156	7.01	381	95.2	1.1	17.6
Date		SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (00945)	NITROGEN, AMMONIA DIS-SOLVED (MG/L) (00608)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L) (00625)	NITROGEN, NO2+NO3 SOLVED (MG/L) (00631)	NITROGEN, NITRITE DIS-SOLVED (MG/L) (00613)	ORTHO-PHOSPHATE, DIS-SOLVED (MG/L) (00671)	PHOSPHORUS, TOTAL (MG/L) (00665)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	COLIFORM, FECAL, 0.7 UM-F (COLS./100 ML) (31625)	IRON, DIS-SOLVED (MG/L) (01046)	MANGANESE, DIS-SOLVED (MG/L) (01056)	SELENIUM, DIS-SOLVED (MG/L) (01145)
SEP 04...	1830	3210	.06	.43	1.24	.022	<.02	.024	100	110	<30	643	5
Date		2,6-DIETHYL ANILINE, WAT FLT (UG/L) (01147)	ACETOCHLOR, WATER FLTRD (UG/L) (82660)	ALACHLOR, WATER, DISS, REC (UG/L) (49260)	ALPHA BHC, DIS-SOLVED (UG/L) (46342)	ATRAZINE, WATER, DISS, REC (UG/L) (34253)	BENFLURALIN, WAT FLD (UG/L) (82673)	BUTYLATE, WATER, DISS, REC (UG/L) (04028)	CARBARYL, WATER, FLTRD (UG/L) (82680)	CARBON FURAN, WATER, FLTRD (UG/L) (82674)	CHLORPYRIFOS, SOLVED (UG/L) (38933)	CYANAZINE, WATER, DISS, REC (UG/L) (04041)	DCPA, WATER, FLTRD (UG/L) (82682)
SEP 04...	7	<.006	<.006	<.004	<.005	.049	<.010	<.002	<.041	<.020	<.005	<.018	<.003
Date		DEETHYL ATRAZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS-SOLVED (UG/L) (39572)	DI- ELDRIN, DIS-SOLVED (UG/L) (39381)	DISULFOTON, WATER, FLTRD (UG/L) (82677)	EPTC, WATER, FLTRD (UG/L) (82668)	ETHALFLURALIN, WAT FLT (UG/L) (82663)	ETHOPROP, WATER, FLTRD (UG/L) (82672)	FONOFOS, WATER, DISS, REC (UG/L) (04095)	LINURON, WATER, FLTRD (UG/L) (82666)	MALATHION, DIS-SOLVED (UG/L) (39532)	METHYL AZINPHOS, WAT FLT (UG/L) (82686)	METHYL PARATHION, WAT FLT (UG/L) (82667)
SEP 04...	E.055	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	E.007	<.050	<.006
Date		METOLACHLOR, WATER, DISSOLV (UG/L) (39415)	METRIBUZIN, WATER, DISSOLV (UG/L) (82630)	MOLINATE, WATER, FLTRD (UG/L) (82671)	NAPROXAMIDE, WATER, FLTRD (UG/L) (82684)	PARA-DDE, DISSOLV (UG/L) (34653)	PEBULATE, WATER, FILTRD (UG/L) (82669)	PENDIMETHALIN, WAT FLT (UG/L) (82683)	PERMETHRIN, WAT FLT (UG/L) (82687)	PHORATE, WATER, FLTRD (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRONAMIDE, WATER, FLTRD (UG/L) (82676)	PROPACHLOR, WATER, DISS, REC (UG/L) (04024)
SEP 04...	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006	<.011	E.01	<.004	<.010
Date			PROPANIL, WATER, FLTRD (UG/L) (82679)	PRO-PARGITE, WATER, FLTRD (UG/L) (82685)	SIMAZINE, WATER, DISS, REC (UG/L) (04035)	TEBUTHIURON, WATER, FLTRD (UG/L) (82670)	TERBACIL, WATER, FLTRD (UG/L) (82665)	TERBUFOS, WATER, FLTRD (UG/L) (82675)	THIOBENCARB, WATER, FLTRD (UG/L) (82681)	TRIAL-LATE, WATER, FLTRD (UG/L) (82678)	TRIFLURALIN, WAT FLT (UG/L) (82661)		
SEP 04...			<.011	<.02	E.004	<.02	<.034	<.02	<.005	<.002	<.009		

E Estimated laboratory analysis value.

DROUGHT SYNOPTIC SAMPLING--Continued

The U.S. Geological Survey (USGS) conducted a synoptic water-quality study during July, August, and September 2002, to characterize water-quality conditions in all of the major river basins in Colorado during the current drought. A tiered sampling approach with common core constituents at all sampling locations was used, facilitating statewide comparisons of water-quality conditions. Additional site-specific parameters were added to the core list depending on local water-quality issues and land use.

374900106545100 RIO GRANDE ABOVE DEEP CREEK NEAR CREEDE, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 37°49'00", long 106°54'51", in SE¹/₄NW¹/₄ sec.7, T.41 N., R.1 E., Mineral County, Hydrologic Unit 13010001, at bridge 20 ft upstream from Deep Creek, 0.5 mi upstream from Willow Creek, and 2.3 mi southeast of Creede.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--September 2002.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L) (00935)	SODIUM, DIS-SOLVED (MG/L) (00930)	CHLO-RIDE, DIS-SOLVED (MG/L) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L) (00950)	SILICA, DIS-SOLVED (MG/L) (00955)	
SEP 18...	0745	100	8.2	7.6	89	9.5	10.7	1.71	1.94	3.78	.89	E.1	20.9	
Date		SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L) AS N (00623)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L) AS N (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) AS N (00613)	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L) AS P (00671)	PHOS-PHORUS TOTAL (MG/L) AS P (00665)	CARBON, ORGANIC DIS-SOLVED (MG/L) AS C (00681)	CARBON, ORGANIC TOTAL (MG/L) AS C (00680)	E COLI, MTEC MF WATER (COL/100 ML) (31633)
SEP 18...	6.3	69	<.015	E.10	.15	<.013	<.002	.031	.025	.043	1.6	2.1	e11	
Date		COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	ALUM-INUM, DIS-SOLVED (UG/L) AS AL (01106)	ANTI-MONY, DIS-SOLVED (UG/L) AS SB (01095)	ARSENIC DIS-SOLVED (UG/L) AS AS (01000)	BARIUM, DIS-SOLVED (UG/L) AS BA (01005)	BERYL-LIUM, DIS-SOLVED (UG/L) AS BE (01010)	CADMIUM DIS-SOLVED (UG/L) AS CD (01025)	CHRO-MIUM, DIS-SOLVED (UG/L) AS CR (01030)	COBALT, DIS-SOLVED (UG/L) AS CO (01035)	COPPER, DIS-SOLVED (UG/L) AS CU (01040)	LEAD, DIS-SOLVED (UG/L) AS PB (01049)	MANGA-NESE, DIS-SOLVED (UG/L) AS MN (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L) AS MO (01060)
SEP 18...	e7	4	.06	E1	18	<.06	<.04	<.8	.07	.6	<.08	10.1	.4	
Date					NICKEL, DIS-SOLVED (UG/L) AS NI (01065)	SELE-NIUM, DIS-SOLVED (UG/L) AS SE (01145)	SILVER, DIS-SOLVED (UG/L) AS AG (01075)	ZINC, DIS-SOLVED (UG/L) AS ZN (01090)	URANIUM NATURAL DIS-SOLVED (UG/L) AS U (22703)					
SEP 18...					.47	<2	<1	<1	.12					

e Estimated value.
E Estimated laboratory analysis value.

DROUGHT SYNOPTIC SAMPLING--Continued

08220000 RIO GRANDE NEAR DEL NORTE, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 37°41'22", long 106°27'38", in NW¹/₄NW¹/₄ (revised) sec.29, T.40 N., R.5 E., Rio Grande County, Hydrologic Unit 13010001, on right bank 20 ft downstream from county highway bridge, 5.0 mi upstream from Pinos Creek, and 6.0 mi west of Del Norte.

DRAINAGE AREA.--1,320 mi², approximately.

PERIOD OF RECORD.--October 1967 to September 1968, December 1993 to January 1994, September 2002.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPE-CIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNESIUM, DIS-SOLVED (MG/L) (00925)	POTASSIUM, DIS-SOLVED (MG/L) (00935)	SODIUM, DIS-SOLVED (MG/L) (00930)	CHLORIDE, DIS-SOLVED (MG/L) (00940)	FLUORIDE, DIS-SOLVED (MG/L) (00950)	SILICA, DIS-SOLVED (MG/L) (00955)	
SEP 18...	1015	158	8.3	7.9	111	11.5	11.7	1.71	1.93	4.30	1.37	E.1	19.0	
Date		SULFATE AT 180 DEG. C DIS-SOLVED (MG/L) (00945)	NITROGEN, AMMONIA DIS-SOLVED (MG/L) (00608)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L) (00623)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L) (00625)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)	NITROGEN, NITRITE DIS-SOLVED (MG/L) (00613)	PHOSPHORUS, DIS-SOLVED (MG/L) (00666)	ORTHO-PHOSPHATE, DIS-SOLVED (MG/L) (00671)	PHOSPHORUS, TOTAL (MG/L) (00665)	CARBON, ORGANIC DIS-SOLVED (MG/L) (00681)	CARBON, ORGANIC TOTAL (MG/L) (00680)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	
SEP 18...	9.6	82	<.015	.12	.18	<.013	<.002	.036	.028	.051	1.7	2.2	13	
Date		COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	ALUMINUM, DIS-SOLVED (UG/L) (01106)	ANTIMONY, DIS-SOLVED (UG/L) (01095)	ARSENIC, DIS-SOLVED (UG/L) (01000)	BARIUM, DIS-SOLVED (UG/L) (01005)	BERYLLIUM, DIS-SOLVED (UG/L) (01010)	CADMIUM, DIS-SOLVED (UG/L) (01025)	CHROMIUM, DIS-SOLVED (UG/L) (01030)	COBALT, DIS-SOLVED (UG/L) (01035)	COPPER, DIS-SOLVED (UG/L) (01040)	LEAD, DIS-SOLVED (UG/L) (01049)	MANGANESE, DIS-SOLVED (UG/L) (01056)	MOLYBDENUM, DIS-SOLVED (UG/L) (01060)
SEP 18...	14	5	.08	E1	22	<.06	.18	<.8	.07	1.0	.34	11.3	.5	
Date					NICKEL, DIS-SOLVED (UG/L) (01065)	SELENIUM, DIS-SOLVED (UG/L) (01145)	SILVER, DIS-SOLVED (UG/L) (01075)	ZINC, DIS-SOLVED (UG/L) (01090)	URANIUM, NATURAL DIS-SOLVED (UG/L) (22703)					
SEP 18...					.66	<2	<1	54	.21					

E Estimated laboratory analysis value.

DROUGHT SYNOPTIC SAMPLING--Continued

08246500 CONEJOS RIVER NEAR MOGOTE, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 37°03'14", long 106°11'13", in SE¹/₄SE¹/₄ sec.34, T.33 N., R.7 E., Conejos County, Hydrologic Unit 13010005, on left bank 75 ft downstream from bridge on State Highway 17 (revised), 0.4 mi downstream from Fox Creek, 5.3 mi west of Mogote, and 10 mi west of Antonito.

DRAINAGE AREA.--282 mi².

PERIOD OF RECORD.--October 1967 to September 1968, September 2002.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L) (00935)	SODIUM, DIS-SOLVED (MG/L) (00930)	CHLO-RIDE, DIS-SOLVED (MG/L) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L) (00950)	SILICA, DIS-SOLVED (MG/L) AS (00955)	
SEP 18...	1315	33	8.4	8.3	90	11.5	11.7	1.89	1.75	2.70	.50	E.1	20.0	
Date		SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) AS SO4 (00945)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L) AS N (00623)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L) AS N (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) AS N (00613)	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L) AS P (00671)	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00665)	CARBON, ORGANIC DIS-SOLVED (MG/L) AS C (00681)	CARBON, ORGANIC TOTAL (MG/L) AS C (00680)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	
SEP 18...	2.4	74	<.015	.12	.12	<.013	<.002	.015	.012	.025	1.2	1.8	e3	
Date		COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	ALUM-INUM, DIS-SOLVED (UG/L) AS AL (01106)	ANTI-MONY, DIS-SOLVED (UG/L) AS SB (01095)	ARSENIC DIS-SOLVED (UG/L) AS AS (01000)	BARIUM, DIS-SOLVED (UG/L) AS BA (01005)	BERYL-LIUM, DIS-SOLVED (UG/L) AS BE (01010)	CADMIUM DIS-SOLVED (UG/L) AS CD (01025)	CHRO-MIUM, DIS-SOLVED (UG/L) AS CR (01030)	COBALT, DIS-SOLVED (UG/L) AS CO (01035)	COPPER, DIS-SOLVED (UG/L) AS CU (01040)	LEAD, DIS-SOLVED (UG/L) AS PB (01049)	MANGA-NESE, DIS-SOLVED (UG/L) AS MN (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L) AS MO (01060)
SEP 18...	e5	2	.06	E1	17	<.06	<.04	<.8	.06	.3	<.08	4.0	E.2	
Date						NICHEL, DIS-SOLVED (UG/L) AS NI (01065)	SELE-NIUM, DIS-SOLVED (UG/L) AS SE (01145)	SILVER, DIS-SOLVED (UG/L) AS AG (01075)	ZINC, DIS-SOLVED (UG/L) AS ZN (01090)	URANIUM NATURAL DIS-SOLVED (UG/L) AS U (22703)				
SEP 18...						.47	<2	<1	<1	.05				

e Estimated value.
 E Estimated laboratory analysis value.

DROUGHT SYNOPTIC SAMPLING--Continued

08251500 RIO GRANDE NEAR LOBATOS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 37°04'43", long 105°45'23", in NE¹/₄NW¹/₄ sec.27, T.33 N., R.11 E., Conejos County, Hydrologic Unit 13010002, on right bank at highway bridge, 5.7 mi upstream from Colorado-New Mexico State line (revised), 8 mi downstream from Culebra Creek, 11 mi east of Lobatos, and 14 mi east of Antonito.

DRAINAGE AREA.--7,700 mi², approximately, includes 2,940 mi² in closed basin in northern part of San Luis Valley, CO.

PERIOD OF RECORD.--September 1969 to current year. September 1969 to September 1993 under the National Stream-Quality Accounting Network (NASQAN). April 1993 to September 1996 under the Rio Grande National Water-Quality Assessment Program.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE (DEG C) (00010)	HARDNESS TOTAL (MG/L) (00900)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNESIUM, DIS-SOLVED (MG/L) (00925)	POTASSIUM, DIS-SOLVED (MG/L) (00935)	SODIUM, DIS-SOLVED (MG/L) (00930)	CHLORIDE, DIS-SOLVED (MG/L) (00940)	FLUORIDE, DIS-SOLVED (MG/L) (00950)	
JUL 11...	1130	12	9.5	8.6	461	21.5	84	20.8	7.78	7.82	64.0	15.4	.86	
AUG 15...	1030	7.0	7.6	9.0	450	18.5	58	12.1	6.66	8.31	69.5	17.6	1.08	
Date		SILICA, DIS-SOLVED (MG/L) (00955)	SULFATE DIS-SOLVED (MG/L) (00945)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300)	NITROGEN, AMMONIA DIS-SOLVED (MG/L) (00608)	NITROGEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L) (00623)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L) (00625)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)	NITROGEN, NITRITE DIS-SOLVED (MG/L) (00613)	PHOSPHORUS, DIS-SOLVED (MG/L) (00666)	ORTHOPHOSPHATE, DIS-SOLVED (MG/L) (00671)	PHOSPHORUS, TOTAL (MG/L) (00665)	E COLI, WATER (COLS./100 ML) (31633)	COLIFORM, FECAL, UM-MF (COLS./100 ML) (31625)
JUL 11...	17.8	51.4	284	<.04	.38	.64	<.05	<.008	.011	<.02	.069	20	--	
AUG 15...	8.79	53.0	263	<.04	.43	.68	<.05	<.008	.013	<.02	.061	e14	e11	
Date		ALUMINUM, DIS-SOLVED (UG/L) (01106)	ANTIMONY, DIS-SOLVED (UG/L) (01095)	ARSENIC, DIS-SOLVED (UG/L) (01000)	BARIUM, DIS-SOLVED (UG/L) (01005)	BERYLLIUM, DIS-SOLVED (UG/L) (01010)	CADMIUM, DIS-SOLVED (UG/L) (01025)	CHROMIUM, DIS-SOLVED (UG/L) (01030)	COBALT, DIS-SOLVED (UG/L) (01035)	IRON, DIS-SOLVED (UG/L) (01046)	LEAD, DIS-SOLVED (UG/L) (01049)	MANGANESE, DIS-SOLVED (UG/L) (01056)	MOLYBDENUM, DIS-SOLVED (UG/L) (01060)	NICKEL, DIS-SOLVED (UG/L) (01065)
JUL 11...	6	.17	5	34	<.06	E.03	<.8	.32	E7	.13	20.3	8.1	.81	
AUG 15...	--	--	--	--	--	--	--	--	14	--	20.3	--	--	
Date		SELENIUM, DIS-SOLVED (UG/L) (01145)	SILVER, DIS-SOLVED (UG/L) (01075)	ZINC, DIS-SOLVED (UG/L) (01090)	URANIUM, NATURAL DIS-SOLVED (UG/L) (22703)									
JUL 11...		<2	<1	1	1.96									
AUG 15...		--	--	--	--									

e Estimated value.
E Estimated laboratory analysis value.

QUALITY OF GROUND WATER

EL PASO COUNTY

384056104415601 - SC01606505CCB - FOUNTAIN NO. 3

LOCATION.--Lat 38°40'56", long 104°41'56", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.5, T.16 S., R.65 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Fountain Creek Alluvial Aquifer.

WELL CHARACTERISTICS.--Municipal well, diameter 16 in. (24 in. prior to 1989), depth 53 ft, screened 38 to 53 ft.

DATUM.--Elevation of land-surface datum is 5,540 ft above sea level, from topographic map.

PERIOD OF RECORD.--March 1985 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)
FEB 22...	1030	7.2	1020	13.0	E.008	1.93	<.008	E.01
SEP 05...	1030	7.2	970	14.5	<.015	1.76	<.008	E.01

E Estimated laboratory analysis value.

384108104420701 - SC01606506DAA - FOUNTAIN NO. 2

LOCATION.--Lat 38°41'08", long 104°42'07", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.6, T.16 S., R.65 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Fountain Creek Alluvial Aquifer.

WELL CHARACTERISTICS.--Municipal well, diameter 16 in. (24 in. prior to 1990), depth 57 ft, screened 42 to 57 ft.

DATUM.--Elevation of land-surface datum is 5,549.6 ft above sea level, from levels.

PERIOD OF RECORD.--March 1985 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)
FEB 22...	1050	7.3	1140	13.0	E.014	1.76	<.008	.02
SEP 05...	1100	7.5	1090	14.0	<.015	1.47	<.008	E.01

E Estimated laboratory analysis value.

384323104432201 - SC01506625ABB - WIDEFIELD NO. 5

LOCATION.--Lat 38°43'23", long 104°43'22", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.25, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Widefield Aquifer of Fountain Creek Alluvium.

WELL CHARACTERISTICS.--Municipal well, diameter 16 in., depth 47 ft, screened 26.5 to 46.5 ft.

DATUM.--Elevation of land-surface datum is 5,640 ft above sea level, from topographic map.

PERIOD OF RECORD.--February 1999 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)
FEB 22...	1150	7.3	852	14.0	.025	5.94	<.008	.04
SEP 05...	1225	7.2	1110	15.0	<.015	7.52	<.008	.03

QUALITY OF GROUND WATER

EL PASO COUNTY--Continued

384345104241401 - SC01506324CBB - SWEET WATER NO. 1

LOCATION.--Lat 38°43'45", long 104°24'11", in NW¼NW¼SW¼ sec.24, T.15 S., R.63 W., El Paso County, Hydrologic Unit 11020004.

AQUIFER.--Black Squirrel Alluvial Aquifer.

WELL CHARACTERISTICS.--Public-supply well, diameter 16 in., depth 152 ft, screened 112 to 152 ft.

DATUM.--Elevation of land-surface datum is 5,712 ft above sea level, from topographic map.

PERIOD OF RECORD.--February 1999 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)
FEB 21...	1215	7.4	315	13.5	<.015	4.73	<.008	.06
SEP 09...	1410	7.5	319	14.5	<.015	4.81	<.008	.06

384407104434801 - SC01506624BAD1 - WIDEFIELD NO. 4

LOCATION.--Lat 38°44'07", long 104°43'48", in SE¼NE¼NE¼ sec.24, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Widefield Aquifer of Fountain Creek Alluvium.

WELL CHARACTERISTICS.--Municipal well, diameter 16 in., depth 71 ft, screened 41 to 71 ft.

DATUM.--Elevation of land-surface datum is 5,685 ft above sea level, from topographic map.

PERIOD OF RECORD.--February 1981 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)
FEB 22...	1215	7.1	569	13.5	E.009	6.34	<.008	E.02
SEP 05...	1255	7.1	562	14.5	<.015	6.87	<.008	E.02

E Estimated laboratory analysis value.

[384433104440702 - SC01506613CBD2 - U-14](#)

LOCATION.--Lat 38°44'33", long 104°44'07", in SW¼NW¼SE¼ sec.13, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Widefield Aquifer of Fountain Creek Alluvium.

WELL CHARACTERISTICS.--Monitor well, diameter 2 in., depth 73 ft, screened 43 to 46 ft.

DATUM.--Elevation of land-surface datum is 5,701 ft above sea level, from levels.

PERIOD OF RECORD.--October 1992 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)
FEB 21...	1750	7.2	564	12.5	<.015	6.17	<.008	E.02
SEP 09...	1720	7.0	552	13.5	<.015	7.58	<.008	.02

E Estimated laboratory analysis value.

QUALITY OF GROUND WATER

EL PASO COUNTY--Continued

384459104443401 - SC01506614ABD - SECURITY NO. 16

LOCATION.--Lat 38°44'59", long 104°44'34", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.14, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Widefield Aquifer of Fountain Creek Alluvium.

WELL CHARACTERISTICS.--Municipal well, diameter 24 in., depth 76 ft, screening unknown.

DATUM.--Elevation of land-surface datum is 5,719.6 ft above sea level, from levels.

PERIOD OF RECORD.--May to September 2002.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)
MAY 28...	1015	7.1	475	13.5	E.014	7.38	<.008	.02
SEP 05...	1345	7.0	498	14.5	<.015	6.90	<.008	.02

E Estimated laboratory analysis value.

384535104450801 - SC01506611BCD2 - VENETUCCI NO. 3

LOCATION.--Lat 38°45'35", long 104°45'08", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.11, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Widefield Aquifer of Fountain Creek Alluvium.

WELL CHARACTERISTICS.--Irrigation well, diameter 24 in., depth 80 ft, screening unknown.

DATUM.--Elevation of land-surface datum is 5,750 ft above sea level, from topographic map.

PERIOD OF RECORD.--February 1981 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)
FEB 22...	1250	7.2	487	13.5	E.013	7.32	<.008	.06
SEP 09...	1640	7.1	510	14.0	<.015	7.14	<.008	.06

E Estimated laboratory analysis value.

[384604104451502 - SC01506602CCC2 - U-9](#)

LOCATION.--Lat 38°46'04", long 104°45'15", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.2, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Widefield Aquifer of Fountain Creek Alluvium.

WELL CHARACTERISTICS.--Monitor well, diameter 2 in., depth 55 ft, screened 51 to 53 ft.

DATUM.--Elevation of land-surface datum is 5,773.8 ft above sea level, from levels.

PERIOD OF RECORD.--October 1992 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)
FEB 21...	1640	8.1	609	13.0	<.015	9.27	<.008	.14
SEP 05...	1610	7.9	631	15.0	<.015	9.96	<.008	.13

QUALITY OF GROUND WATER

EL PASO COUNTY--Continued

384610104453501 - SC01506603DDB - SECURITY NO. 14

LOCATION.--Lat 38°46'10", long 104°45'35", in NW¼SE¼SE¼ sec.14, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Widefield Aquifer of Fountain Creek Alluvium.

WELL CHARACTERISTICS.--Municipal well, diameter 24 in., depth 80 ft, screened 39 to 80 ft.

DATUM.--Elevation of land-surface datum is 5,779.2 ft above sea level, from levels.

PERIOD OF RECORD.--February 1981 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)
MAY 28...	1055	7.1	577	14.0	E.010	7.82	<.008	.04
SEP 05...	1415	7.0	594	14.5	<.015	7.93	<.008	.04

E Estimated laboratory analysis value.

384617104455901 - SC01506603CAD - STRATMOOR HILLS NO. 4

LOCATION.--Lat 38°46'17", long 104°45'59", in SE¼NE¼SW¼ sec.3, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Widefield Aquifer of Fountain Creek Alluvium.

WELL CHARACTERISTICS.--Municipal well, diameter 12 in. (16 in. prior to 1998), depth 49 ft, screened 29 to 49 ft.

DATUM.--Elevation of land-surface datum is 5,775.4 ft above sea level, from levels.

PERIOD OF RECORD.--February 1981 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)
FEB 22...	1415	7.4	656	14.0	.024	7.66	<.008	E.01
SEP 05...	1450	7.3	654	15.0	<.015	7.58	<.008	.02

E Estimated laboratory analysis value.

384639104461401 - SC01506603BAC1 - MARS GAS

LOCATION.--Lat 38°46'39", long 104°46'14", in SW¼NE¼NW¼ sec.3, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Fountain Creek Alluvial Aquifer.

WELL CHARACTERISTICS.--Commercial well, diameter 6 in., depth 85 ft, screened 50 to 85 ft.

DATUM.--Elevation of land-surface datum is 5,820 ft above sea level, from topographic map.

PERIOD OF RECORD.--March 1985 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)
FEB 22...	1450	7.3	1040	13.0	.016	3.18	<.008	E.01
SEP 09...	1530	7.3	1170	17.5	<.015	6.17	.030	.02

E Estimated laboratory analysis value.

QUALITY OF GROUND WATER

EL PASO COUNTY--Continued

384653104451901 - SC01506602BBB - TH-18LOCATION.--Lat 38°46'53", long 104°45'19", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.2, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Widefield Aquifer of Fountain Creek Alluvium.

WELL CHARACTERISTICS.--Monitor well, diameter 2 in., depth 122 ft, screened 96 to 122 ft.

DATUM.--Elevation of land-surface datum is 5,889.6 ft above sea level, from levels.

PERIOD OF RECORD.--August 1991 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)
FEB 21...	1510	7.1	455	13.0	E.008	9.13	<.008	.07
SEP 09...	1115	7.0	462	14.5	<.015	9.33	<.008	.08

E Estimated laboratory analysis value.

384718104463701 - SC01406633DAA - BARNES WELL

LOCATION.--Lat 38°47'18", long 104°46'37", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.33, T.14 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Fountain Creek Alluvial Aquifer.

WELL CHARACTERISTICS.--Domestic well, diameter 6 in., depth 72 ft, screening unknown.

DATUM.--Elevation of land-surface datum is 5,830 ft above sea level, from topographic map.

PERIOD OF RECORD.--March 1985 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)
FEB 22...	1555	7.2	1220	13.0	.046	8.26	<.008	E.01
SEP 09...	1600	7.0	1350	14.5	E.008	9.28	<.008	.02

E Estimated laboratory analysis value.

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CONVERSION FACTORS

Multiply	By	To obtain
<i>Length</i>		
inch (in.)	2.54×10^1	millimeter
	2.54×10^{-2}	meter
foot (ft)	3.048×10^{-1}	meter
mile (mi)	1.609×10^0	kilometer
<i>Area</i>		
acre	4.047×10^3	square meter
	4.047×10^{-1}	square hectometer
	4.047×10^{-3}	square kilometer
square mile (mi ²)	2.590×10^0	square kilometer
<i>Volume</i>		
gallon (gal)	3.785×10^0	liter
	3.785×10^0	cubic decimeter
	3.785×10^{-3}	cubic meter
million gallons (Mgal)	3.785×10^3	cubic meter
	3.785×10^{-3}	cubic hectometer
cubic foot (ft ³)	2.832×10^1	cubic decimeter
	2.832×10^{-2}	cubic meter
cubic-foot-per-second day [(ft ³ /s) d]	2.447×10^3	cubic meter
	2.447×10^{-3}	cubic hectometer
acre-foot (acre-ft)	1.233×10^3	cubic meter
	1.233×10^{-3}	cubic hectometer
	1.233×10^{-6}	cubic kilometer
<i>Flow</i>		
cubic foot per second (ft ³ /s)	2.832×10^1	liter per second
	2.832×10^1	cubic decimeter per second
	2.832×10^{-2}	cubic meter per second
gallon per minute (gal/min)	6.309×10^{-2}	liter per second
	6.309×10^{-2}	cubic decimeter per second
	6.309×10^{-5}	cubic meter per second
million gallons per day (Mgal/d)	4.381×10^1	cubic decimeter per second
	4.381×10^{-2}	cubic meter per second
<i>Mass</i>		
ton (short)	9.072×10^{-1}	megagram or metric ton

Temperature

Temperature in degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) as follows:

$$^{\circ}\text{F} = (1.8 \times ^{\circ}\text{C}) + 32$$